

HATFIELD MCCOY REGINAL RECREATION AUTHORITY
LINCOLN COUNTY, WEST VIRGINIA
IVY BRANCH TRAILHEAD CABINS PROCUREMENT & INSTALLATION

ADDENDUM #1

APRIL 30, 2021

THRASHER PROJECT #030-10042

TO WHOM IT MAY CONCERN:

A Pre-Bid Conference was held on Tuesday, April 20, 2021 on the above-referenced project, a copy of the sign in sheet is included in this Addendum. The following are clarifications and responses to questions posed by contractors for the above reference project.

A. GENERAL

1. **THE BID FORM HAS BEEN REVISED. YOU MUST USE THE REVISED BID FORM WHEN PREPARING YOUR BID PACKAGE FOR THIS PROJECT.**

B. SPECIFICATIONS

Spec Section 012200 was updated to add Items 5 and 19-22. Items 5-13 were renumbered to reflect the changes.

C. DRAWINGS

Sheet 3 of the Plan Set was revised to include Bid Items 5 and 19-22. Items 5-13 were renumbered to reflect the changes.

D. QUESTIONS AND RESPONSES

QUESTION

1. Bid Item 17- New Liberty 1/2-HP Effluent Pump. Is this pump to be placed in the liquid Side of the Concrete Septic Tank and then to pump to a drain field?

RESPONSE

The on-site system is a complete Home Aeration Unit. However, the Bid Item 17- New Liberty 1/2-HP Effluent Pump along with Bid Items 19-22 are missing from the system. The contractor shall install Bid Items 17, 19, 20, 22 in accordance

with the existing system configuration. Bid Item 21 shall be installed on or near the Electrical Control Shed and utilized the existing underground conduit to provided power to the HAU system.

QUESTION

2. The existing tank which is there, is that not an Aerator system with a Aerator Pump (Missing) and a Chlorine Contact Filter on the discharge side?

RESPONSE

The on-site system is a complete Home Aeration Unit. However, the Bid Item 17- New Liberty 1/2-HP Effluent Pump along with Bid Items 19-22 are missing from the system. The contractor shall install Bid Items 17, 19, 20, 22 in accordance with the existing system configuration. Bid Item 21 shall be installed on or near the Electrical Control Shed and utilized the existing underground conduit to provided power to the HAU system.

QUESTION

3. Could you elaborate a little more on the Septic Tank / Aerator and what the contractor is to do?

RESPONSE

The on-site system is a complete Home Aeration Unit. However, the Bid Item 17- New Liberty 1/2-HP Effluent Pump along with Bid Items 19-22 are missing from the system. The contractor shall install Bid Items 17, 19, 20, 22 in accordance with the existing system configuration. Bid Item 21 shall be installed on or near the Electrical Control Shed and utilized the existing underground conduit to provided power to the HAU system.

E. CLARIFICATIONS

1. (Clarification #1) See Article 6 – Bonds and Insurance section 6.05-A-2 of the Standard General Conditions of the Construction Contract within the Project Contract Documents and Specifications for builder’s risk insurance requirements.
2. (Clarification #2) The Engineer’s Opinion of Probable Cost for the project is **\$560,195.00**.
3. (Clarification #3) Bid Item #5- Electrical Control Shed was added to the Revised Bid Form.
4. (Clarification #4) The Previous Bid Item #13 - 36" Sweep Elbows Per A.E.P. Requirements is still required for the project yet it is now incidental to New Bid Item #13 - 4” SCH 40 Electric Conduit.

If you have any questions or comments, please feel free to contact me at your earliest convenience. As a reminder, bids will be received until **1:00 p.m.** on **Thursday, May 6, 2021** at The Thrasher Group's office located at 160 Association Drive, Charleston, WV. Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



Richard G. Hovatter, Jr., PE
Project Manager



**HATFIELD MCCOY REGIONAL RECREATION AUTHORITY
LINCOLN COUNTY, WEST VIRGINIA
IVY BRANCH TRAILHEAD CABINS PROCUREMENT & INSTALLATION**

**MANDATORY PRE-BID CONFERENCE
Tuesday, April 20, 2021**

Thrasher Project #030-10042

Name	Representing	Phone #	Email Address
Eddie Layne	Benchmark Const. Co. Inc.	304-881-2686	e.layne@bmcwu.com
Chris Kennedy	Stillwater Construction	304 546-7267	chris@stillwaterconstruction.com
Kelly Pauley	Ampeco Inc.	304-539-8570	ampeco18@gmail.com
Ronnie Wiley	Wiley Log Homes	540-892-8527	Ronnie@WileyLogHomes.com
Ethan Kline	Stillwater Const.	304-494-4046	Kline.ethan87@gmail.com
Casey Cantrell	JARRETT CONSTRUCTION	304-344-9140	caseycantrell@jarrett-construction.com
Scott Cunningham	SQA Construction	304-532-3659	esthew@sqapgc.com
Austin King	Asster Construction	304-343-5400	AKing@AssterConstruction.com
Jason Hannsch	S+E	304 687 8883	jhlumber@cpkco.com

Name	Representing	Phone #	Email Address
DERRICK SEARS	FOSTER SUPPLY	304-553-6565	dsears@fostersupply.com
BOB FAHA	H-M TRAILS	" 785-2301	BFAHA@HOTMAIL.COM
Lt Pack	H.M TRAILS	304-752-3325	LTPACK@HOTMAIL.COM
Blaine Barringer	WV DEP AML		Gabriel.B.Barringer@WV.GOV
Dave Bowman	HMT	304-545-7678	DHB722@yahoo.com
Roger Earle	WV DEP - AML	926-0499	Roger.A.Gaule@wv.gov
Greg Mitchell	OSMRE	304 347 7158	gjmitchell@osmre.gov
Shon Cyfers	WV DEP - AML	304-926-0499	Shon.M.Cyfers@wv.gov
Barry A Whitt	WV DEP - AML	304-640-6017	Barry.A.Whitt@wv.gov

HATFIELD MCCOY REGIONAL RECREATION AUTHORITY
LINCOLN COUNTY, WEST VIRGINIA
PROPOSED
IVY BRANCH TRAILHEAD CABINS PROCUREMENT & INSTALLATION
THRASHER PROJECT #101-030-10042

BID FORM

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

*Hatfield McCoy Regional Recreation Authority
4260 Julian Road
Julian, WV 25529*

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum Date</u>
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_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect

to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

GENERAL

The Bidder shall take notice of and shall be responsible for any local or state taxes levied and applicable, and the cost for the same shall be included as part of the submitted Bid.

The total Bid cost stated includes a complete operating installation including furnishing and installation of any and all changes or additions in plans, piping, mechanical work, additional electrical work, accessories, controls, etc. necessary to accommodate alternative equipment systems or materials used in construction.

BID PROPOSAL

The Bidder agrees to perform all required Work described in the detailed Specifications and as shown on the Plans for the complete construction and placing in satisfactory operation the Ivy Branch Trailhead Cabins Procurement & Installation. The Project "Sequence of Construction" has been detailed in the Drawings and Specification Division 1, Project Summary, Section 1010, Part-2 Execution. The Bidder agrees to perform all the Work proposed for the total of the following Bid prices.

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

PROPOSED
IVY BRANCH TRAILHEAD CABINS PROCUREMENT & INSTALLATION
FOR THE
HATFIELD MCCOY REGIONAL RECREATION AUTHORITY
LINCOLN COUNTY, WEST VIRGINIA

BID SCHEDULE

NOTE: Bid Unit PRICE amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. Bids shall include sales tax and all other applicable taxes and fees.

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
1	1	LS	Mobilization/Demobilization (Shall Not Exceed 10% of Total Bid)			
2	1	LS	Cabin Installation			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
3	5	EA	Non ADA Log Cabin			
4	1	EA	ADA Log Cabin			
5	1	EA	Electrical Control Shed			
6	1,450	LF	#1 THHN Copper Electrical Wire			
7	1,665	LF	#1/0 THHN Copper Electrical Wire			
8	1,035	LF	#6 THHN Copper Ground Wire			
9	215	LF	#12 THHN Copper Electrical Wire			
10	110	LF	#12 THHN Copper Ground Wire			
11	8	LF	#4 Solid Copper Grounding Wire			
12	1	EA	(2) 5/8" x 8' Copper Clad Ground Rods & (2) Clamps			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
13	155	LF	4" Underground PVC SCH. 40 Conduit			
14	1	EA	Intersystem Bonding Termination Per A.E.P Requirements			
15	1	EA	6" x 8" x 6" Junction Box			
16	6	EA	Cabin Utility Extensions / Tie-ins			
17	1	EA	New Liberty 1/2 HP Effluent Pump			
18	200	TN	3/4" Crusher Run			
19	1	EA	HAU Bio-Kinetic Filter			
20	1	EA	HAU 18" Lid Riser			
21	1	EA	HAU Control Panel with High Water Alarm			
22	1	EA	HAU Aerator Motor			

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
23	1	LS	AEP connection fee for the new service line at the site	600.00	Six Hundred Dollars and Zero Cents	600.00
24	1	T&M	AEP installation of main service line by the linear foot	400.00	Four Hundred Dollars and Zero Cents	400.00

TOTAL BID: _____
 _____ (\$ _____)

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

DEDUCTIVE ALTERNATE #1

Item #	Qty.	UNIT	DESCRIPTION	UNIT PRICE	UNIT PRICE WRITTEN IN WORDS	TOTAL PRICE
3	1	EA	Non ADA Log Cabin			
6	120	LF	#1 THHN Copper Electrical Wire			
8	40	LF	#6 THHN Copper Ground Wire			
16	1	EA	Cabin Utility Extensions / Tie-ins			

DEDUCTIVE ALTERNATE #1: _____
 _____ (\$ _____)

(Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.) The unit price in the deductive alternate must be the same as shown in the base bid.

NOTE: THE CONTRACTOR'S UNIT PRICES SHALL INCLUDE PURCHASE AND INSTALLATION, COMPLETE IN PLACE, PER BID ITEM IN ACCORDANCE WITH THE DETAILED SPECIFICATIONS.

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

METHOD OF AWARD

If at the time this contract is to be awarded, the lowest total bid submitted by a qualified, responsible Bidder does not exceed the amount of funds then estimated by the Owner, as available to finance the contract, the construction contract will be awarded. If such bids exceed such amount, the Owner may reject all bids.

The owner may award the contract on the Total Bid submitted by a qualified responsible Bidder less the amount(s) of the Deductive Alternate(s) subtracted in numerical order, as listed in the contract to produce the lowest bid within the funds available for financing.

- A. Unit prices have been computed in accordance with paragraph 13.03.A of the General Conditions.

- B. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Bid Opening Requirements

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:
[Signature] _____

[Printed name] _____
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:
[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____
(where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related requirements:
 - 1. Section 013300 – Submittal Procedures

1.2 1.2 DEFINITIONS

- A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.
- B. Contract Documents include all specifications, plan drawings and referenced specifications.
- C. Units of Measure:
 - a. AC – Acre
 - b. EA – Each
 - c. CY – Cubic Yard
 - d. DA – Per Day
 - e. DY/24 HR – Per Day (24 hours)
 - f. LBS - Pounds
 - g. LF – Linear Foot
 - h. LS – Lump Sum
 - i. SF – Square Foot
 - j. SY – Square Yard
 - k. TN – Ton
 - l. GAL – Gallon
 - m. MO - Month

1.3 1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- C. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PART 2 - PRODUCTS (Not Used)

PART 3 - PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

1. MOBILIZATION / DEMOBILIZATION

- a. This bid item shall include payment of all bonding costs incurred by the contractor. It shall also consist of the performance and construction preparatory operations, including the movement of personnel to the project site and the unloading, transporting, and reloading of materials and equipment to the project site. The payment request for mobilization in the first pay estimate shall not exceed 10% of the total bid price for the contract. The balance of the lump sum item shall be considered demobilization and shall be paid at contract close out.
- b. Unit of Measure: LS

2. Cabin Installation

- a. This bid item shall include the installation of the cabins at the site as indicated in the plans. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with delivering, placing, jacking, setting on piers, leveling, and prepping for use the cabins as part of this contract.
- b. Unit of Measure: LS

3. Non-ADA Log Cabins

- a. This bid item shall include the purchase of 5 - 12' by 34' mobile log cabins as indicated in the plans and specifications. All Non-ADA cabins shall include an 8-foot-wide front porch, handrails, and stairs as well as a rear emergency landing, stairs, and guardrail. Each cabin shall be complete and include all items listed in section 310500. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with coordinating with manufacturer, placing the order, paying the down payment, and coordinating the delivery to the site as part of this contract.
- b. Specification Section: 310500
- c. Unit of Measure: EA

4. ADA Log Cabins

- a. This bid item shall include the purchase of 1 - 15' by 27' mobile log cabins as indicated in the plans and specifications. The ADA cabin shall include an 8-foot-wide front porch, handrails, stairs, ADA access ramp, concrete ADA access pad, rear emergency landing, ADA platform to connect rear landing to the ADA ramp, and guardrail. Each cabin shall be complete and include all items listed in section 310500. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with coordinating with manufacturer, placing the order, paying the down payment, and coordinating the delivery to the site as part of this contract.
- b. Specification Section: 310500
- c. Unit of Measure: EA

5. Electrical Control Shed
 - a. This bid item shall include the purchase, delivery, construction, and/or assembly of an 8' by 8' wooden framed shed set on a 4" thick reinforced concrete slab floor. The shed shall be complete and include all items listed in section 310501. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, installation, and/or construction of the shed onsite.
 - b. Specification Section: 310501
 - c. Unit of Measure: EA

6. #1 THHN Copper Electrical Wire
 - a. This bid item shall include the purchase, delivery, installation, and panel box connections of #1 THHN copper electrical wire into the existing conduits running from the panel boxes in the electrical shed to the panel boxes of Cabins 3, 4, 5, and 6. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
 - b. Specification Section: 260519
 - c. Unit of Measure: LF

7. #1/0 THHN Copper Electrical Wire
 - a. This bid item shall include the purchase, delivery, installation, and panel box connections of #1/0 THHN copper electrical wire into the existing conduits running from the panel boxes in the electrical shed to the panel boxes of Cabins 1 and 2. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
 - b. Specification Section: 260519
 - c. Unit of Measure: LF

8. #6 THHN Copper Ground Wire
 - a. This bid item shall include the purchase, delivery, installation, and panel box connections of #6 THHN copper ground wire into the existing conduits running from the electrical shed location to the panel boxes of all 6 Cabins. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
 - b. Specification Section: 260526
 - c. Unit of Measure: LF

9. #12 THHN Copper Electrical Wire
 - a. This bid item shall include the purchase, delivery, installation, and panel box connections of #12 THHN copper electrical wire into the existing conduit running from the electrical shed location to the existing HAU sewage system as well as the interior electrical work in the shed. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
 - b. Specification Section: 260519
 - c. Unit of Measure: LF

10. #12 THHN Copper Ground Wire

- a. This bid item shall include the purchase, delivery, installation, and panel box connections of #12 THHN copper ground wire into the existing conduit running from the electrical shed location to the existing HAU sewage system as well as the interior electrical work in the shed. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
- b. Specification Section: 260526
- c. Unit of Measure: LF

11. #4 Solid Copper Ground Wire

- a. This bid item shall include the purchase, delivery, installation, and connections of #4 solid copper ground wire from the multi-gang meter socket to the copper grounding rods in accordance with AEP specifications. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
- b. Specification Section: 260526
- c. Unit of Measure: LF

12. 5/8" x 8' Copper Clad Ground Rods and Clamps

- a. This bid item shall include the purchase, delivery, and installation of 2 – 5/8" x 8' copper clad grounding rods and clamps in accordance with AEP specifications. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
- b. Specification Section: 260526
- c. Unit of Measure: EA

13. 4" SCH 40 ELECTRIC CONDUIT

- a. This bid item shall constitute full compensation for labor, materials, equipment, and other costs associated with installation of 4" SCH 40 electric conduit, to be installed from electrical shed to the 4" conduit on power pole per AEP recommendations and as specified in the contract documents. AEP will install the conductor in this conduit and it **will not** be included in the Contractors pricing.
- b. 4" diameter 36" SCH 40 Sweep Elbows shall be installed at 90 degree turns locate at the pole base and electrical shed.
- c. The following items shall be included in the unit price cost:
 1. Cleaning the conduit, installing ¼" nylon pull ropes, and pull ropes with hooks;
 2. Trench excavation, bedding, cover and backfill;
 3. Detectable warning tape in backfill.
- d. Specification Section: 260533, 260543
- e. Unit of Measure: LF

14. Intersystem Bonding Termination

- a. This bid item shall include the purchase, delivery, and installation of an intersystem bonding termination in accordance with AEP specifications. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
- b. Specification Section: 260526
- c. Unit of Measure: EA

15. 6" x 8" x 6" Quazite Junction Box

- a. This bid item shall include the purchase, delivery, and installation of a 6" x 8" x 6" quazite junction box in the location indicated on the plans. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
- b. Specification Section: 260533, 260543
- c. Unit of Measure: EA

16. Cabin Utility Extensions/ Tie-ins

- a. This bid item shall include the purchase, delivery, and installation of all necessary utilities from the existing stub out locations into each cabin and connected to the cabin connections points. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation.
- b. Specification Section: 221113, 221313, 260519, and 260526
- c. Unit of Measure: EA

17. New Liberty ½ HP Effluent Pump

- a. This bid item shall include the purchase, delivery, installation, and operational verification of a ½ HP New Liberty effluent pump in the existing HAU system for the cabins. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation of the pump. Contractor shall make all necessary electrical connections and shall verify the operation of the pump and HAU system as part of this item.
- b. Specification Section: Plan Drawings
- c. Unit of Measure: EA

18. 3/4" CRUSHER RUN

- a. This bid item shall constitute full compensation for all labor, materials, equipment and other costs associated with 3/4" Crusher Run placement in accordance with the contract documents.
- b. This bid item shall apply to subgrade preparation and furnishing and placing clean crusher run aggregate in the areas identified on the plan drawings.
- c. Weigh tickets from the commercial supplier for imported 3/4" crusher run that is delivered and placed at the locations identified on the plan drawings shall be submitted with pay applications.
- d. Specification Section: Plan Drawings
- e. Unit of Measure: TN

19. HAU Bio-Kinetic Filter

- a. This bid item shall include the purchase, delivery, installation, and operational verification of a Bio-Kinetic Filter in the existing HAU system for the cabins. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation of the filter.
- b. Specification Section: Plan Drawings
- c. Unit of Measure: EA

20. HAU 18" Lid Riser

- a. This bid item shall include the purchase, delivery, and installation of an 18" Lid Riser on the existing HAU system for the cabins. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation of the riser.
- b. Specification Section: Plan Drawings
- c. Unit of Measure: EA

21. HAU Control Panel with High Water Alarm

- a. This bid item shall include the purchase, delivery, installation, and operational verification of a Control Panel with High Water Alarm for the existing Cabin HAU system. The contractor shall use the existing conduit from the Shed to the HAU system and install The Control Panel with High Water Alarm next to or on the Electrical Control Shed. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation of the Control Panel and High Water Alarm. Contractor shall make all necessary electrical connections shall verify the operation of the High Water Alarm.
- b. Specification Section: Plan Drawings
- c. Unit of Measure: EA

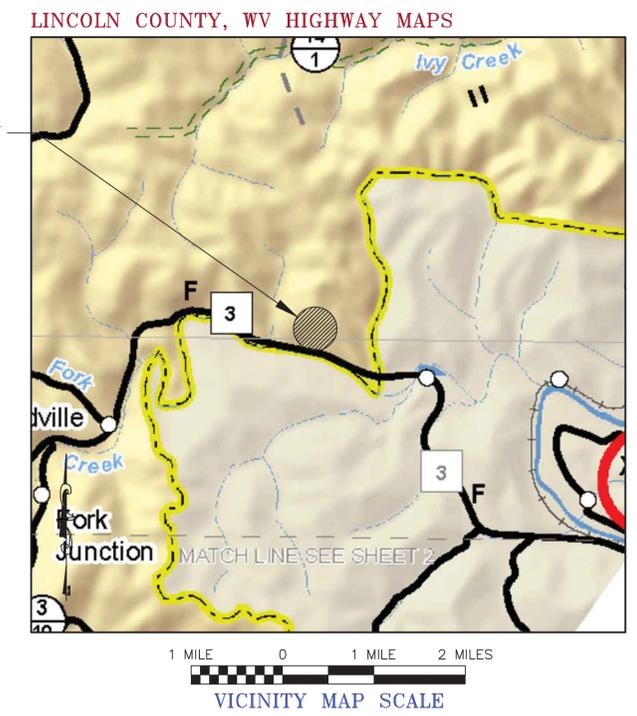
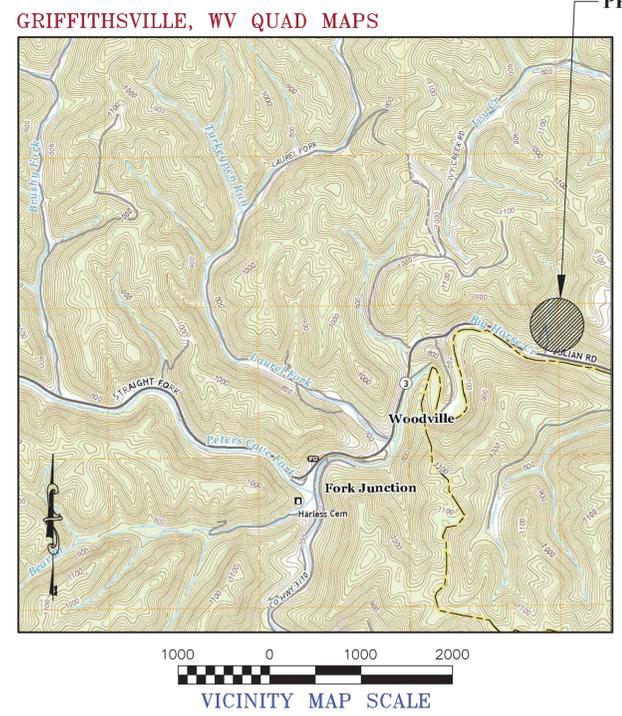
22. HAU Aerator Motor

- a. This bid item shall include the purchase, delivery, installation, and operational verification of the Aerator Motor in the existing HAU system for the cabins. This item shall provide full compensation for all labor, materials, equipment, and other costs associated with the purchase, delivery, and installation of the motor. Contractor shall make all necessary electrical connections shall verify the operation of the motor.
- b. Specification Section: Plan Drawings
- c. Unit of Measure: EA

END OF SECTION 012200

HATFIELD McCOY REGIONAL RECREATION AUTHORITY IVY BRANCH TRAILHEAD CABINS PROCUREMENT & INSTALLATION LINCOLN COUNTY, WEST VIRGINIA APRIL 2021

SHEET INDEX	
SHEET	DESCRIPTION
1	COVER
2	GENERAL NOTES
3	QUANTITIES
4	EXISTING CONDITIONS
5	OVERALL SITE PLAN
6	OVERALL CABIN LAYOUT
7	OVERALL CABIN PIER LAYOUT
8	OVERALL ADA CABIN LAYOUT
9	OVERALL CABIN PIER LAYOUT
10	UTILITIES
11-13	CABIN INSTALLATION - ELECTRICAL
14	OVERALL CABIN UTILITY LAYOUT
15	OVERALL ADA CABIN UTILITY LAYOUT
16-19	DETAILS



- APPROVED FOR PERMITS DATE: _____ BY: _____
- APPROVED FOR BIDS DATE: 4/29/21 BY: EJH
- APPROVED FOR CONSTRUCTION DATE: _____ BY: _____

REVISION NUMBER	REVISED SHEETS	BY	DATE	DESCRIPTION
1	3	JRH	04/29/21	ADDED QUANTITY BID ITEMS 5 & 19-22, REVISED ITEM NUMBERS 5-13

ONE CALL UTILITY SYSTEM CONTACT INFO

WEST VIRGINIA 811

CONTRACTOR SHALL NOTIFY THE ONE-CALL SYSTEM OF THE INTENDED EXCAVATION OR DEMOLITION NOT LESS THAN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL FEDERAL OR STATE HOLIDAYS, NOR MORE THAN TEN (10) WORK DAYS PRIOR TO THE BEGINNING OF SUCH WORK.

RICHARD G. HOVATTER, JR., PE

REGISTERED PROFESSIONAL ENGINEER
STATE OF WEST VIRGINIA
No. 12916
4/29/21

CONTACTS

ENGINEER
THE THRASHER GROUP
ATTN: RICHARD G. HOVATTER, JR., PE
304-205-8809

THRASHER

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CAD FILE: R:\030\030-10042-BOAT LAUNCH-HATFIELD-MCCOY-Drawing\Cabins\Cabin Installation\10042-CABIN-Install-COVER.dwg PLOT DATE/TIME: 4/30/2021 7:45 AM USER: jeffrey hartley

LAYOUT TAB: 3 QUANTITIES
 CAD FILE: R:\030\030-10042-BD\LAUNCH-HATFIELD_MCCOY-Drawing\Cabin_Installation\10042-CABINS-INSTALL-GEN_NOTES.dwg
 PLOT DATE/TIME: 4/30/2021 7:44 AM

Item#	Description	Quantity	
1	Mobilization/Demobilization (Shall Not Exceed 10% of Total Bid)	1	LS
2	Cabin Installation	1	LS
3	Non ADA Log Cabin	5	EA
4	ADA Log Cabin	1	EA
5	Electrical Control Shed	1	EA
6	#1 THHN Copper Electrical Wire	1450	LF
7	#1/0 THHN Copper Electrical Wire	1665	LF
8	#6 THHN Copper Ground Wire	1035	LF
9	#12 THHN Copper Electrical Wire	215	LF
10	#12 THHN Copper Ground Wire	110	LF
11	#4 Solid Copper Grounding Wire	8	LF
12	(2) 5/8" x 8' Copper Clad Ground Rods & (2) Clamps	1	EA
13	4" Underground PVC SCH. 40 Conduit	155	LF
14	Intersystem Bonding Termination Per A.E.P Requirements	1	EA
15	6" x 8" x 6" Junction Box	1	EA
16	Cabin Utility Extensions / Tie-ins	6	EA
17	New Liberty 1/2 HP Effluent Pump	1	EA
18	3/4" Crusher Run	200	TN
19	HAU Bio-Kinetic Filter	1	EA
20	HAU 18" Lid Riser	1	EA
21	HAU Control Panel with High Water Alarm	1	EA
22	HAU Aerator Motor	1	EA



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NO.	BY	DATE	DESCRIPTION
1	JRH	4/29/21	ADDED ITEMS 5 & 19-22, REVISED ITEM #5-13



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 SURVEY BY:
 FIELD BOOK No.:



PHASE No.
 CONTRACT No.
 PROJECT No.
101-030-10042

HMRA
 IVY BRANCH TRAILHEAD CABIN
 PROCUREMENT & INSTALLATION
 LINCOLN COUNTY, WEST VIRGINIA
 QUANTITIES

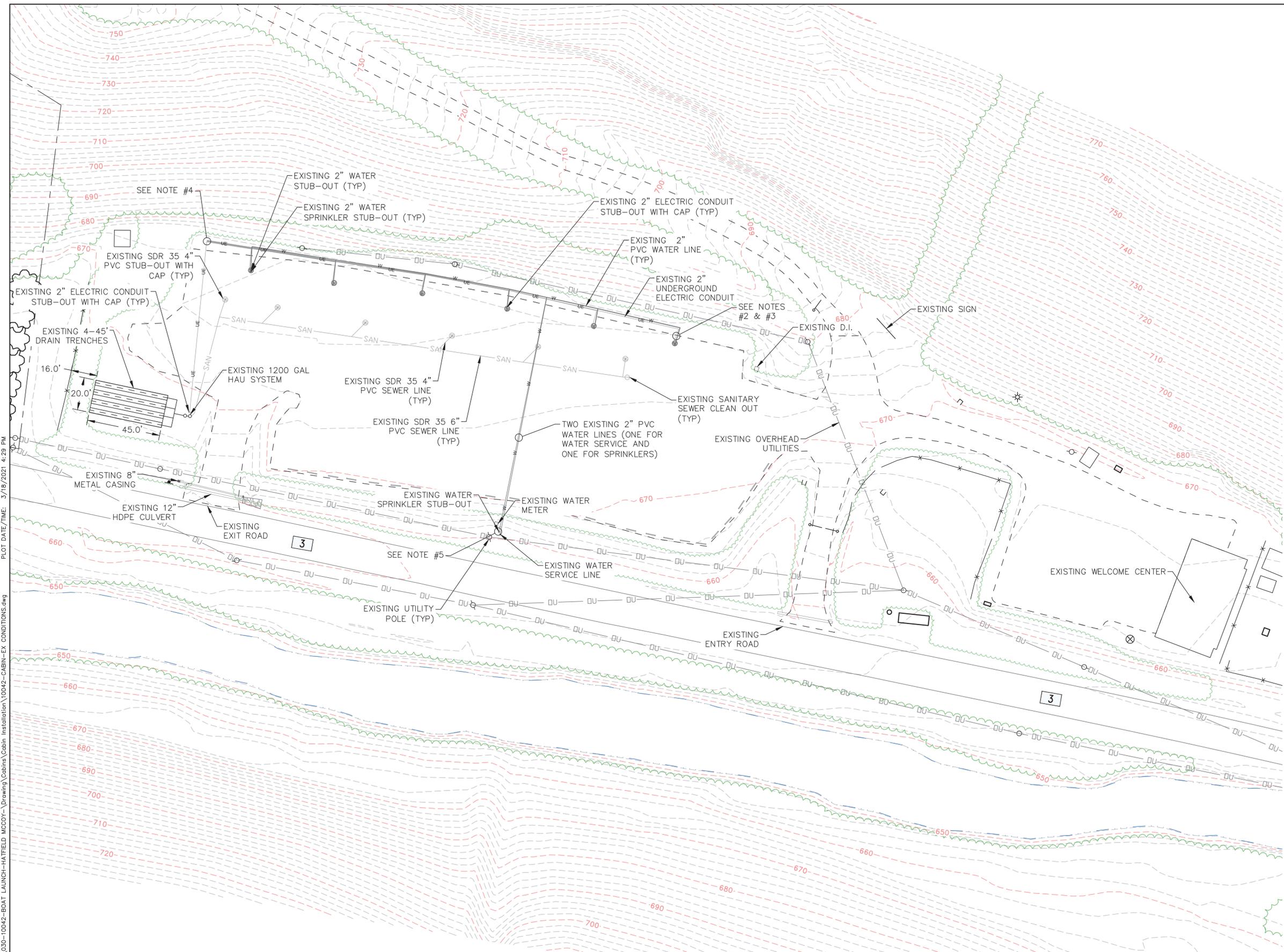
SHEET No.
3

PLAN LEGEND

- EXISTING CONTOURS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD UTILITY
- EXISTING PAVED ROAD
- EXISTING STREAM EDGE
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNPAVED ROAD
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING UTILITY POLE
- EXISTING PIPE INLET
- EXISTING GATE
- EXISTING MAILBOX

NOTES

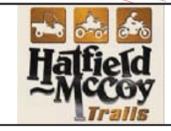
1. EXISTING CONDITIONS ARE A COMBINATIONS OF AERIAL MAPPING PROVIDED BY THE THRASHER GROUP IN NOVEMBER 2019 AND AS BUILT DATA FROM JANUARY 2021.
2. ONE INDIVIDUAL 2" ELECTRIC CONDUIT WAS LAID TO EACH CABIN SITE.
3. TWO 2" WATER LINES, ONE FOR WATER SERVICE AND ONE FOR WATER SPRINKLERS WERE LAID TO EACH CABIN SITE.
4. SEVEN ELECTRICITY STUB-OUTS ARE LOCATED IN THIS AREA. SIX ARE DESIGNATED FOR THE CABINS AND ONE IS DESIGNATED FOR THE HAU SYSTEM.
5. EXISTING WATER SPRINKLER SERVICE LINE IS NOT CONNECTED TO THE WATER VALVE.



LAYOUT TAB: 04-EX CONDITIONS
 CAD FILE: R:\030\030-10042-BOAT LAUNCH-HATFIELD MCCOY-\Drawing\Cabin\Installation\10042-CABIN-EX CONDITIONS.dwg
 PLOT DATE/TIME: 3/18/2021 4:29 PM

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 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
 PHONE (304) 624-4108 • FAX (304) 624-7831

PHASE No.
CONTRACT No.
PROJECT No.
101-030-10042

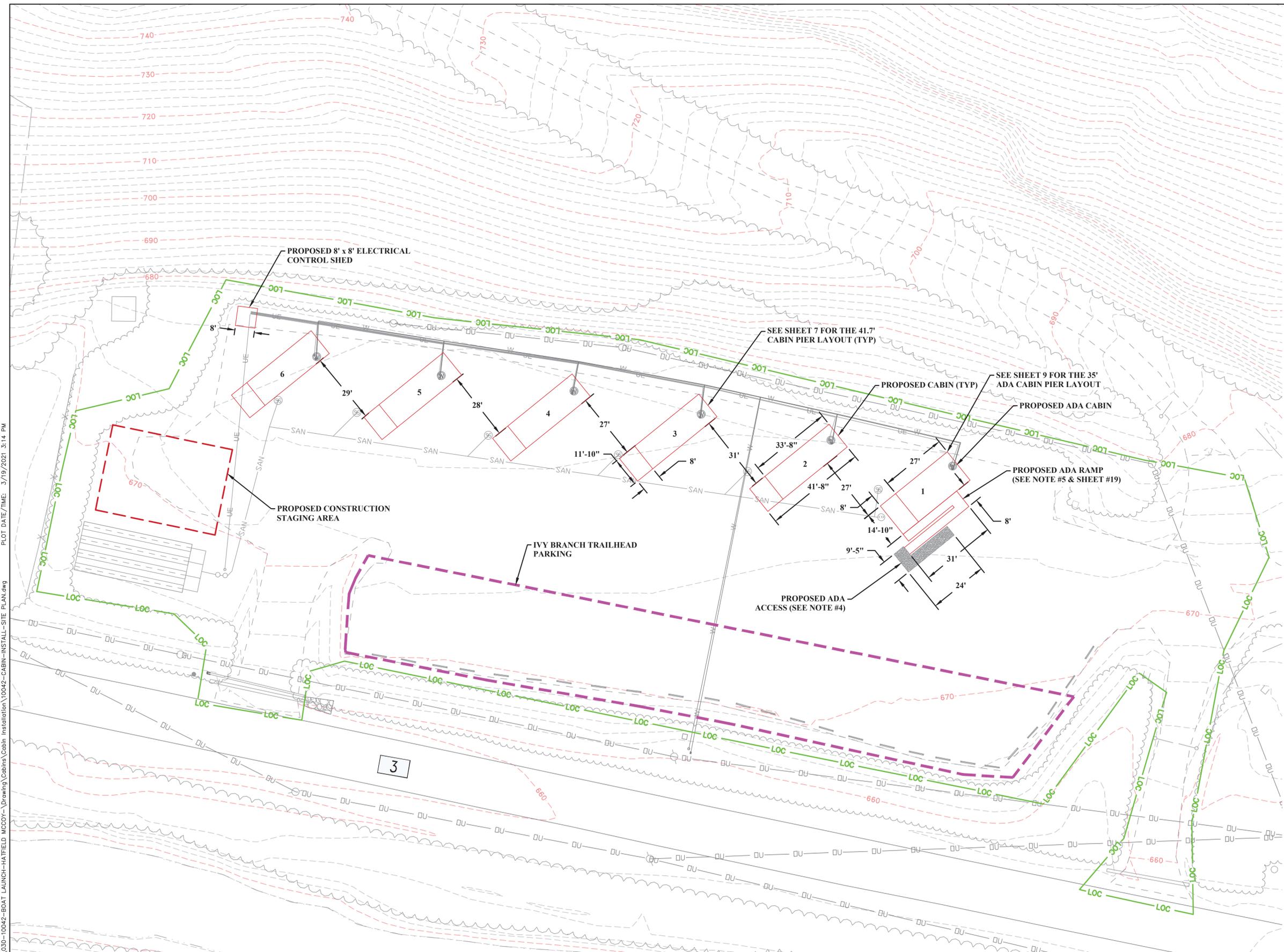
HMRA
 IVY BRANCH TRAILHEAD CABIN
 PROCUREMENT & INSTALLATION
 LINCOLN COUNTY, WEST VIRGINIA
 EXISITNG CONDITIONS

PLAN LEGEND

- EXISTING CONTOURS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD UTILITY
- EXISTING PAVED ROAD
- EXISTING STREAM EDGE
- EXISTING FENCE
- EXISTING UNPAVED ROAD EDGE
- EXISTING WATER LINE
- EXISTING TREELINE
- EXISTING BRUSHLINE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING POST
- EXISTING PIPE INLET
- EXISTING GATE
- EXISTING CATCH BASIN
- EXISTING MAILBOX
- EXISTING MAILBOX
- PROPOSED CABIN
- PROPOSED LIMIT OF CONSTRUCTION

NOTES

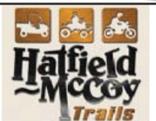
1. THE 11'10" x 33'8" CABIN WITH A 8' PORCH SHOWN MODELS A LANCASTER LAKEVIEW PARK MODEL LOG CABIN.
2. THE 14'10" x 27' CABIN WITH A 8' PORCH SHOWN MODELS AN ADA OZARK PARK MODEL LOG CABIN.
3. SEE SHEET 10, 14, AND 15 FOR UTILITY LAYOUT AND APPROXIMATE TIE-IN LOCATIONS.
4. ADA ACCESS SHALL BE A MIN OF 60" WIDE AND EXTEND THE FULL LENGTH OF THE PARKING SPACE IT SERVES. ACCESS SHALL BE PRECAST OR CAST IN PLACE CONCRETE SLAB.
5. ADA RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12. THE RISE FOR ANY RAMP RUN SHALL BE 30" MAXIMUM. RAMP SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. A MAX OF 30" BETWEEN LANDINGS. RAMP THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60" X 60". THE CLEAR WIDTH BETWEEN HANDRAILS SHALL BE A MIN 36". SEE SHEET 19.
6. SEE SHEET 6 AND 8 FOR FRONT PORCH AND REAR EXIT STEP LAYOUTS.
7. THE CONTRACTOR SHALL USE A PORTION OF THE ON-SITE PARKING AREA AS A CONSTRUCTION STAGING AREA. ALTHOUGH, IT IS NOT SECURE NOR CAN IT BE COMPLETELY COVERED IN CONSTRUCTION MATERIALS AS IT IS THE IVY BRANCH TRAIL SYSTEM PARKING LOT AND WILL BE UTILIZED BY TRAIL RIDERS.



LAYOUT TAB: 05-SITE PLAN
 CAD FILE: R:\050\030-10042-BD&T LAUNCH-HATFIELD MCCOY-Drawing\Cabin Installation\10042-CABIN-INSTALL-SITE PLAN.dwg
 PLOT DATE/TIME: 3/19/2021 3:14 PM

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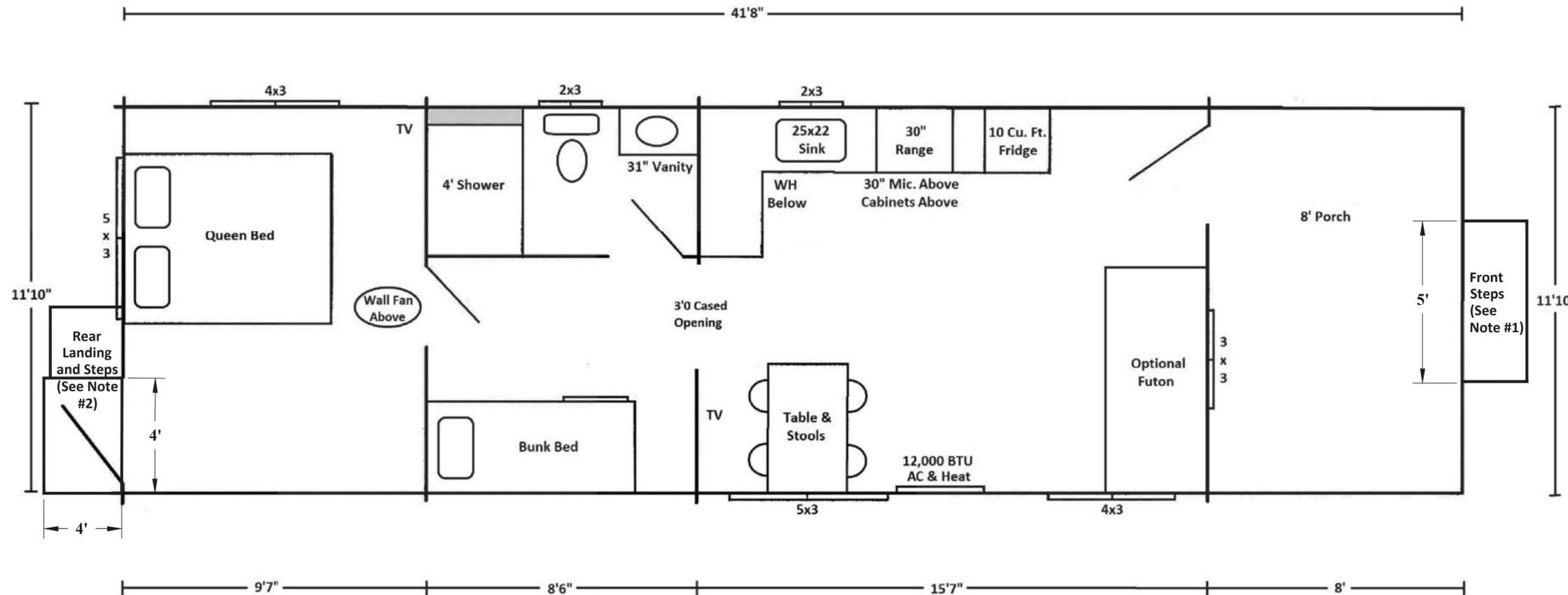
HMRA
IVY BRANCH TRAILHEAD CABIN
PROCUREMENT & INSTALLATION
LINCOLN COUNTY, WEST VIRGINIA
OVERALL SITE PLAN

NOTES

1. THE FRONT PORCH STEPS SHALL MEET THE FOLLOWING REQUIREMENTS (SEE SHEET 18):
 - 1.1. PRESSURE TREATED LUMBER
 - 1.2. MAXIMUM 7" RISERS, MINIMUM 11" TREADS
 - 1.3. 60" WIDE
 - 1.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP.
2. THE REAR STEPS SHALL MEET THE FOLLOWING REQUIREMENTS (SEE SHEET 18):
 - 2.1. PRESSURE TREATED LUMBER
 - 2.2. 48" x 48" LANDING (INCLUDING RAILINGS)
 - 2.3. 42" HIGH GUARD RAILS IF THE LANDING IS OVER 30" ABOVE GRADE
 - 2.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP
 - 2.5. MAXIMUM 7" RISERS, MINIMUM 11" TREADS

Modified Lakeview Log Cabin

11'10"x33'8" Cabin with 8' Porch (400 SF)



LAYOUT TAB: 06-Lakeview Layout
 CAD FILE: R:\030\030-10042-BDAT LAUNCH-HATFIELD MCCOY-\Drawing\Cabin-INSTALL-SITE PLAN.dwg
 PLOT DATE/TIME: 3/18/2021 5:44 PM

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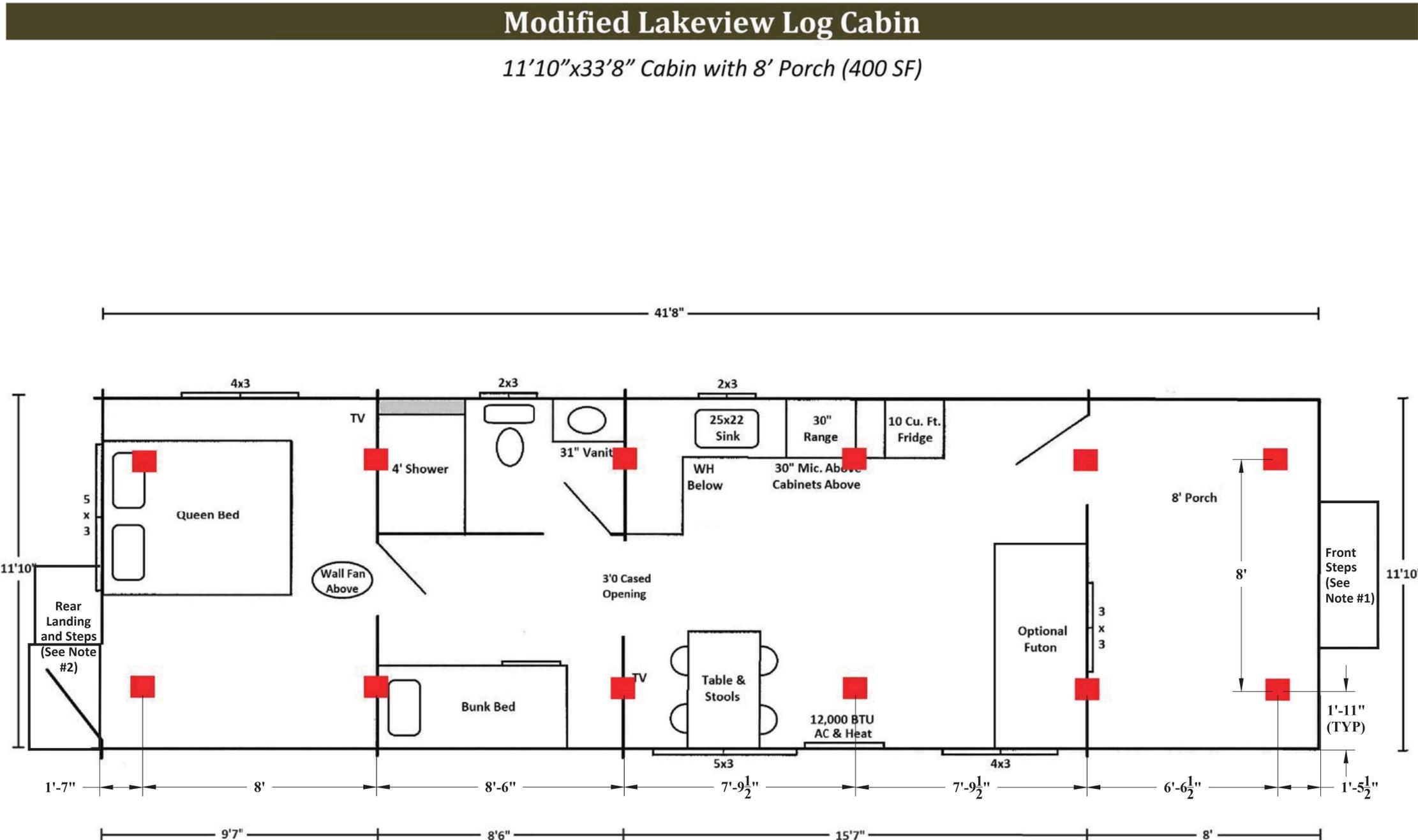
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CONTRACT No.
PROJECT No.
101-030-10042

HMRRA
 IVY BRANCH TRAILHEAD CABIN
 PROCUREMENT & INSTALLATION
 LINCOLN COUNTY, WEST VIRGINIA
 OVERALL CABIN LAYOUT

1. THE FRONT PORCH STEPS SHALL MEET THE FOLLOWING REQUIREMENTS (SEE SHEET 18):
 - 1.1. PRESSURE TREATED LUMBER
 - 1.2. MAXIMUM 7" RISERS, MINIMUM 11" TREADS
 - 1.3. 60" WIDE
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 - 2.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP
 - 2.5. MAXIMUM 7" RISERS, MINIMUM 11" TREADS



LAYOUT TAB: 07-Lakeview_Pier
 CAD FILE: R:\030\030-10042-BD\AT LAUNCH-HATFIELD MCCOY-\Drawing\Cabin-INSTALL-SITE PLAN.dwg
 PLOT DATE/TIME: 3/18/2021 5:45 PM

Modified Lakeview Log Cabin

11'10" x 33'8" Cabin with 8' Porch (400 SF)



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CONTRACT No.
PROJECT No.
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HMRRA
IVY BRANCH TRAILHEAD CABIN
PROCUREMENT & INSTALLATION
LINCOLN COUNTY, WEST VIRGINIA
OVERALL CABIN PIER LAYOUT

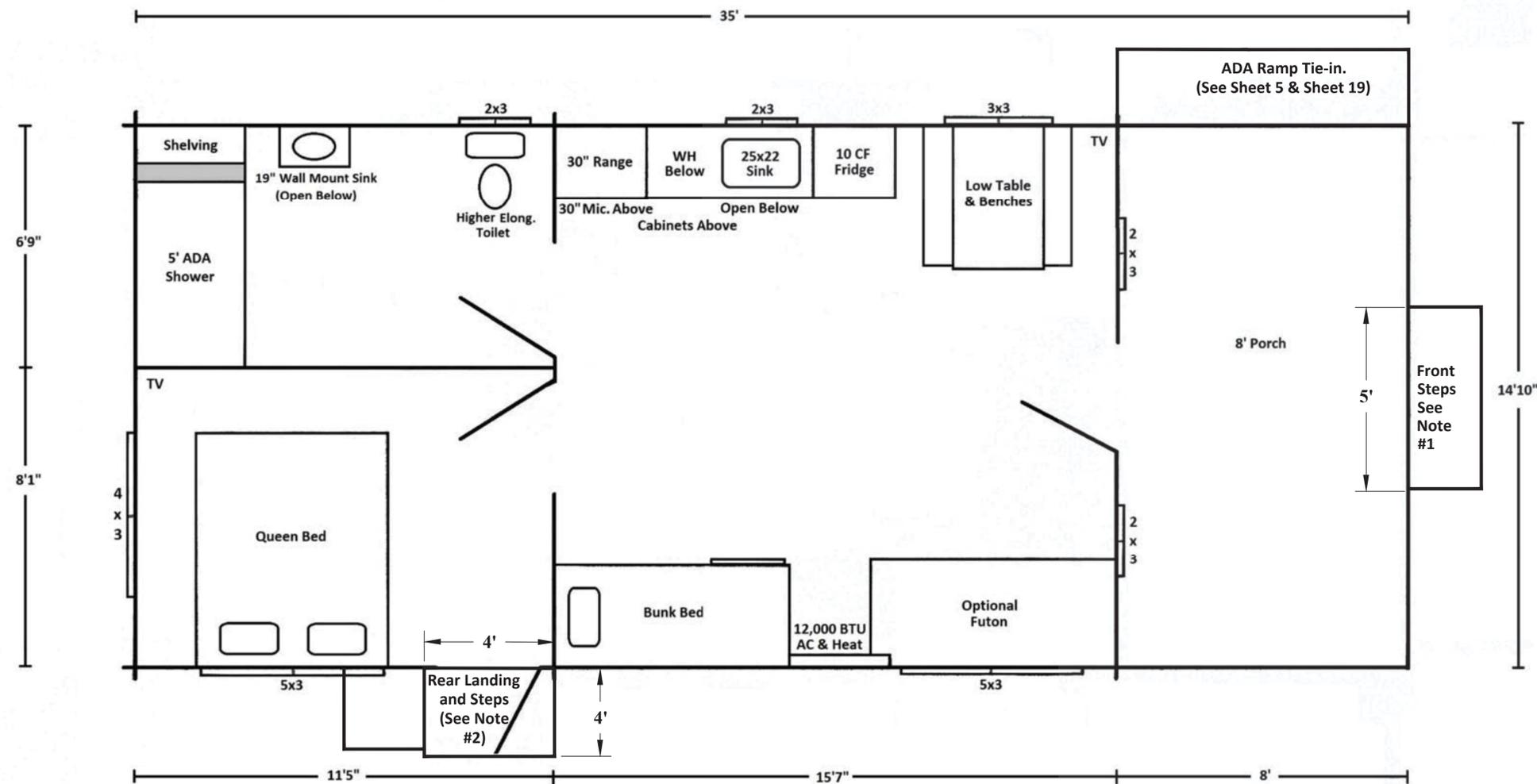
SHEET No.
7

NOTES

1. THE FRONT PORCH STEPS SHALL MEET THE FOLLOWING REQUIREMENTS (SEE SHEET 18):
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 - 1.2. MAXIMUM 7" RISERS, MINIMUM 11" TREADS
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 - 2.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP
 - 2.5. MAXIMUM 7" RISERS, MINIMUM 11" TREADS

Modified ADA Ozark Log Cabin

14'10"x27 Cabin with 8' Porch (400 SF)



LAYOUT TAB: 08-Ozark Layout CAD FILE: R:\030\030-10042-BD&T LAUNCH-HATFIELD MCCOY-Drawing\Cabin-Installation\10042-CABIN-INSTALL-SITE PLAN.dwg PLOT DATE/TIME: 3/18/2021 5:45 PM

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**HMRRA
IVY BRANCH TRAILHEAD CABIN
PROCUREMENT & INSTALLATION
LINCOLN COUNTY, WEST VIRGINIA
OVERALL ADA CABIN LAYOUT**

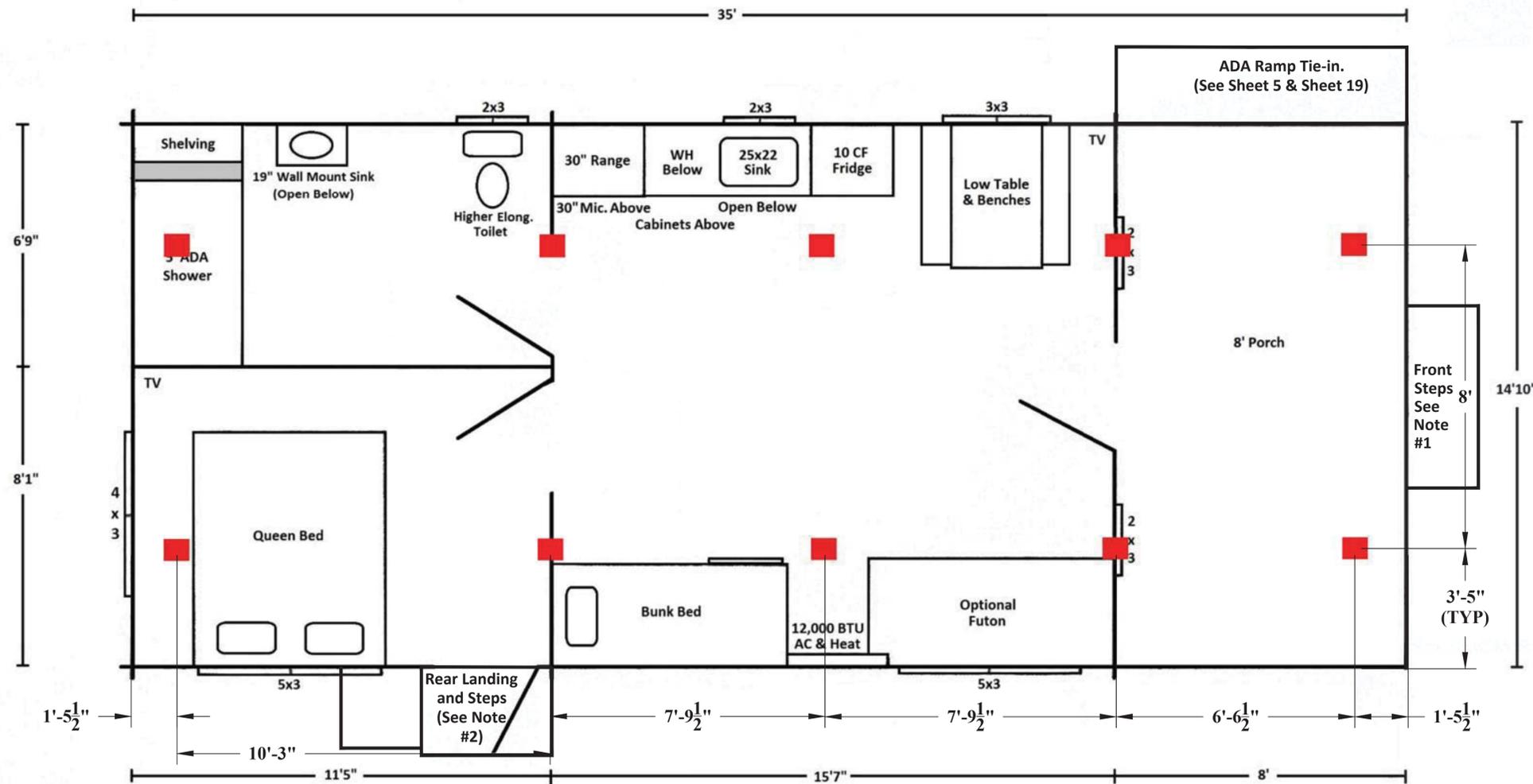
SHEET No.
8

NOTES

1. THE FRONT PORCH STEPS SHALL MEET THE FOLLOWING REQUIREMENTS (SEE SHEET 18):
 - 1.1. PRESSURE TREATED LUMBER
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 - 2.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP
 - 2.5. MAXIMUM 7" RISERS, MINIMUM 11" TREADS

Modified ADA Ozark Log Cabin

14'10"x27 Cabin with 8' Porch (400 SF)



LAYOUT TAB: 09-Ozark Pier CAD FILE: R:\030\030-10042-BDAT LAUNCH-HATFIELD MCCOY-Drawing\Cabin\Installation\10042-CABIN-INSTALL-SITE PLAN.dwg PLOT DATE/TIME: 3/18/2021 5:46 PM

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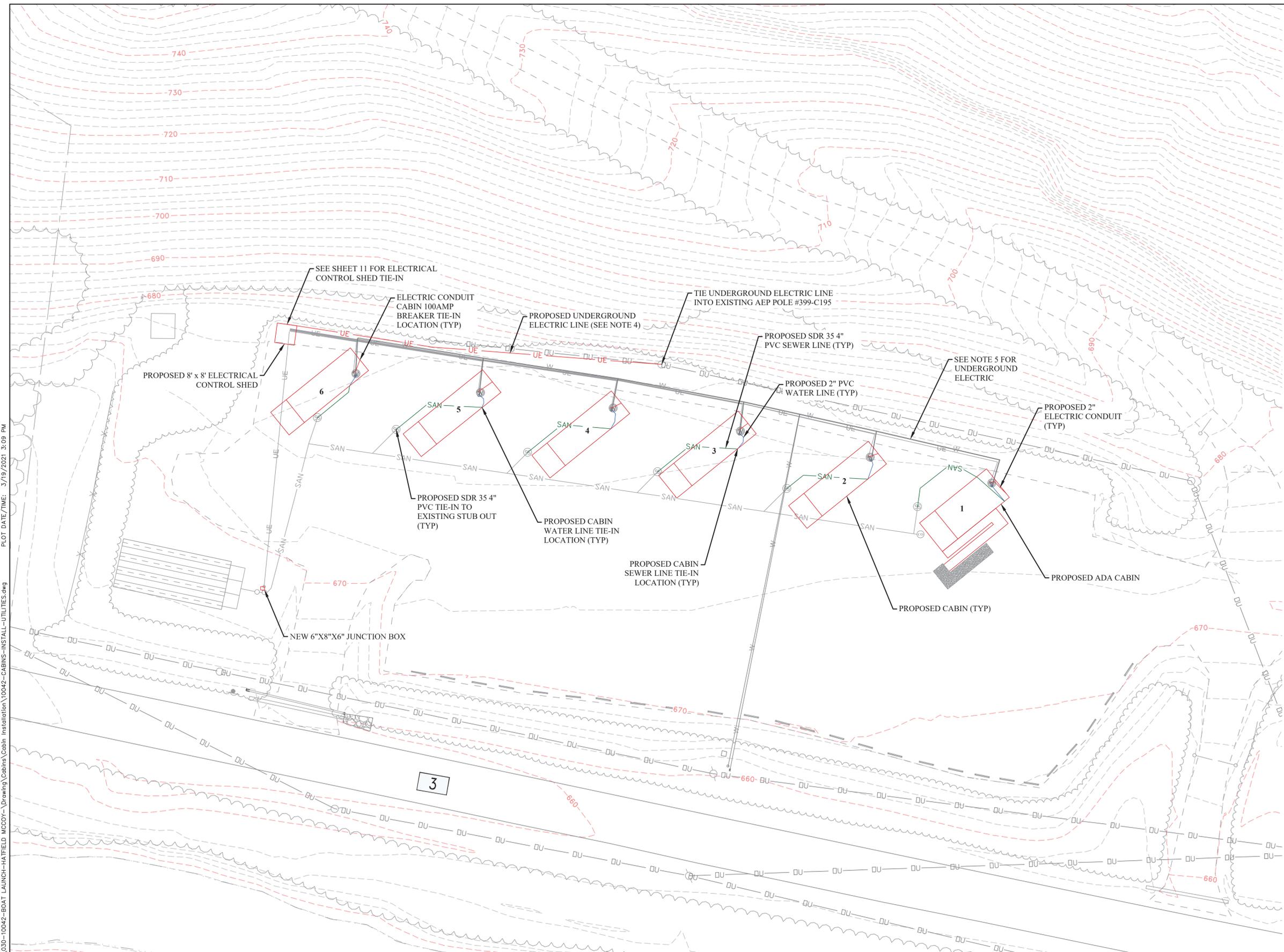
**HMRA
IVY BRANCH TRAILHEAD CABIN
PROCUREMENT & INSTALLATION
LINCOLN COUNTY, WEST VIRGINIA
OVERALL ADA CABIN PIER LAYOUT**

PLAN LEGEND

- EXISTING CONTOURS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD UTILITY
- EXISTING PAVED ROAD
- EXISTING STREAM EDGE
- EXISTING FENCE
- EXISTING WATER LINE
- EXISTING UNPAVED ROAD EDGE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING POST
- EXISTING PIPE INLET
- EXISTING GATE
- EXISTING CATCH BASIN
- EXISTING MAILBOX
- PROPOSED STONE EDGE
- EXISTING STONE TO BE DRESSED
- PROPOSED CABIN
- PROPOSED SMART FENCE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED OUTLET PROTECTION
- PROPOSED WATER LINE
- PROPOSED SANITARY SEWER
- PROPOSED UNDERGROUND ELECTRIC

NOTES

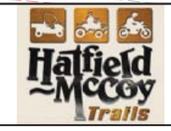
1. ALL UTILITY TIE-IN LOCATIONS SHOWN ARE APPROXIMATE, CONTRACTOR SHALL VERIFY LOCATIONS.
2. SEE SHEET 11 FOR ELECTRICAL TIE-INS.
3. FOR PROPOSED UNDERGROUND ELECTRIC SERVICE, AEP WORK ORDER #029193968
4. CONTRACTOR SHALL INSTALL CONDUIT & PULL ROPE FROM THE EXISTING AEP POLE TO THE PROPOSED ELECTRICAL CONTROL SHED. AEP TO COMPLETE SERVICE/METER INSTALL.
5. CONTRACTOR IS RESPONSIBLE FOR PULLING ELECTRICAL WIRE TO EACH CABIN AND HAU SYSTEM. SEE SHEET 12 FOR ADDITIONAL INFORMATION.



LAYOUT TAB: 10-UTILITIES
 CAD FILE: R:\030\030-10042-BDAT LAUNCH-HATFIELD MCCOY-Drawing\Cabin Installation\10042-CABINS-INSTALL-UTILITIES.dwg
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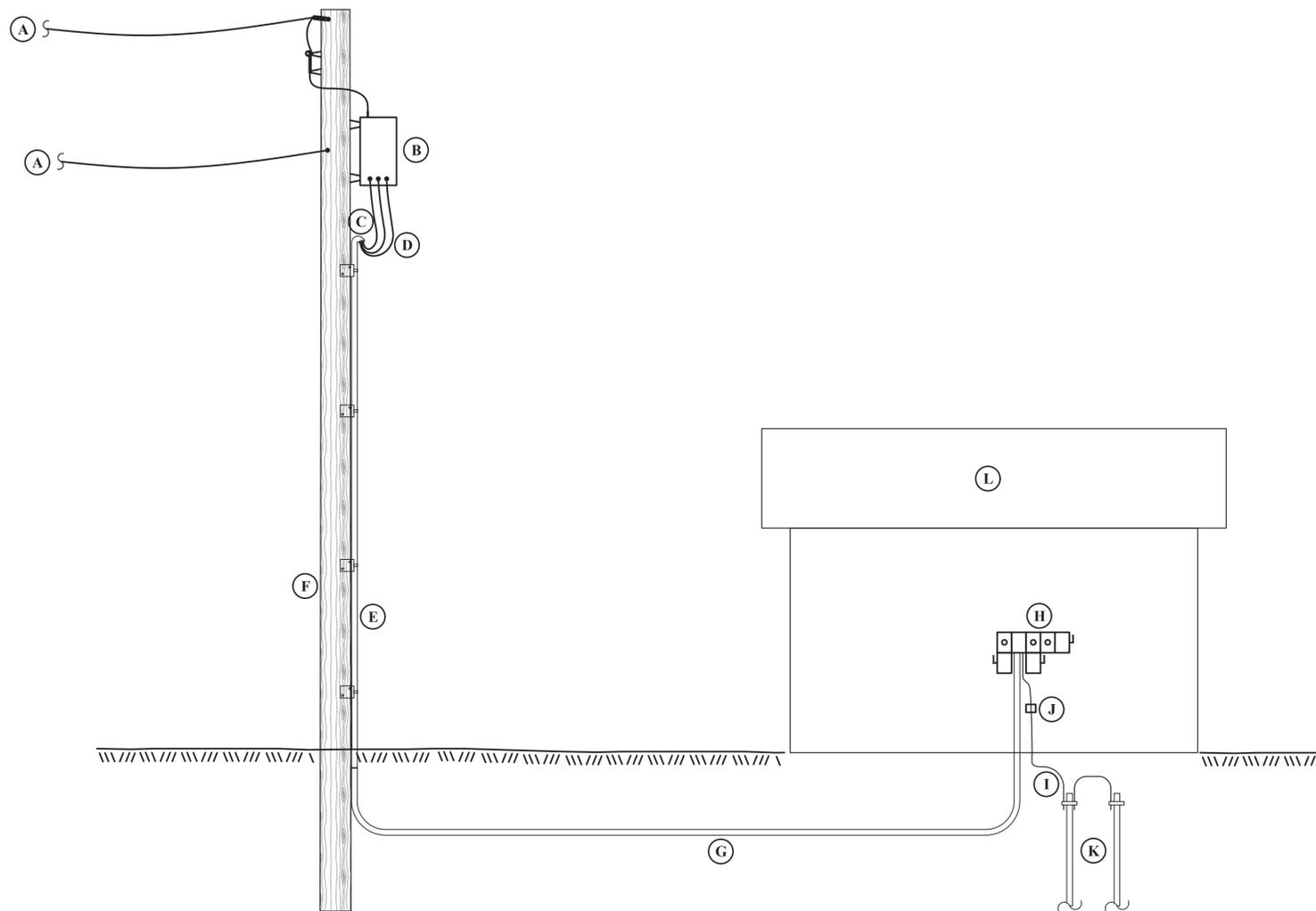


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CONTRACT No.
PROJECT No.
101-030-10042

HMRRA
IVY BRANCH TRAILHEAD CABIN
PROCUREMENT & INSTALLATION
LINCOLN COUNTY, WEST VIRGINIA
UTILITIES



SERVICE ENTRANCE POLE TO ELECTRICAL CONTROL SHED
NOT TO SCALE

NOTE:

1. NOTIFY AEP PRIOR TO CONSTRUCTION TO VERIFY CONSTRUCTION LOCATION AND POWER AVAILABILITY.
2. SITE MUST BE CONSTRUCTED TO ALL AEP INSTALLATION REQUIREMENTS AND BE INSPECTED AND APPROVED BY A CERTIFIED INSPECTOR PRIOR TO AEP CONNECTIONS.

ELECTRICAL ENTRANCE KEY NOTES:

- (A) POWER FROM A.E.P.
- (B) NEW A.E.P. TRANSFORMER. (PROVIDED BY A.E.P.)
- (C) 3" WEATHER HEAD. (PROVIDED BY A.E.P.)
- (D) WIRE AND DRIP LOOP TO BE INSTALLED BY AEP.
- (E) 3" CONDUIT WITH PULL ROPE PER A.E.P. REQUIREMENTS. (PROVIDED BY A.E.P.)
- (F) EXISTING A.E.P. POWER POLE.
- (G) 4" UNDERGROUND PVC SCHEDULE 40 CONDUIT WITH 36" SWEEP ELBOWS PER A.E.P. REQUIREMENTS.
- (H) A.E.P. APPROVED 200 AMP SINGLE PHASE MULTIGANG METER SOCKET, 3 METER POSITIONS WITH DISCONNECTS. (SIMILAR TO UFHT - 3R 2332 T - CH)
- (I) #4 SOLID COPPER GROUNDING WIRE.
- (J) INTERSYSTEM BONDING TERMINATION PER A.E.P. REQUIREMENTS.
- (K) (2) 5/8" x 8' COPPER CLAD GROUND RODS AND (2) CLAMPS PER A.E.P. REQUIREMENTS.
- (L) NEW ELECTRICAL CONTROL SHED. (REAR VIEW)

LAYOUT TAB: 11 CABIN INSTALLATION - ELECTRICAL
CAD FILE: R:\030\030-10042-BDNT LAUNCH-HATFIELD MCCOY-\Drawing\Cabins\Cabin Installation\Electrical\10042-CABIN-INSTALL - E2.00.dwg PLOT DATE/TIME: 4/6/2021 3:38 PM

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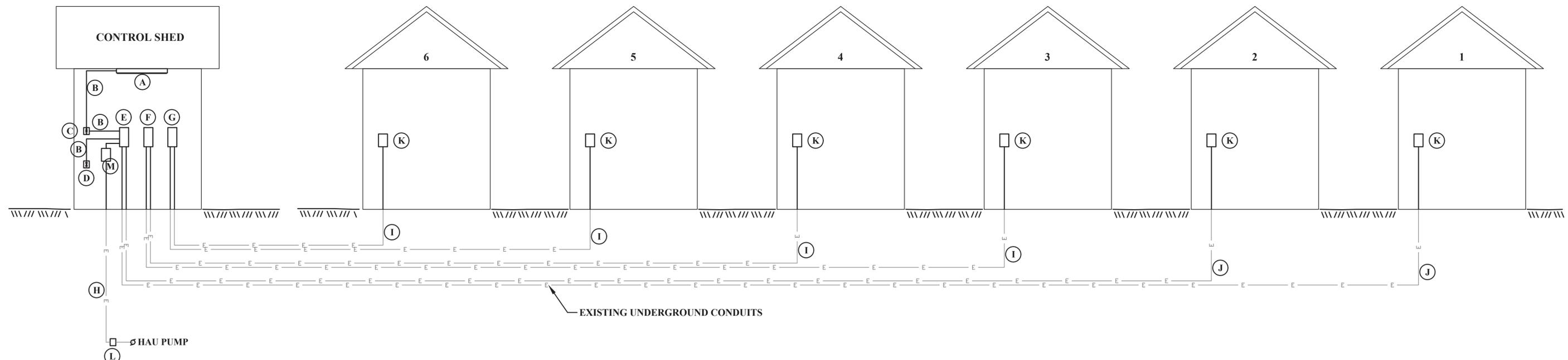
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HMRA
IVY BRANCH TRAILHEAD CABIN
PROCUREMENT & INSTALLATION
LINCOLN COUNTY, WEST VIRGINIA
CABIN INSTALLATION - ELECTRICAL

LAYOUT TAB: 12 CABIN INSTALLATION - ELECTRICAL
 CAD FILE: R:\030\030-10042-BDNT LAUNCH-HATFIELD MCCOY - \Drawing\Cabins\Cabin-INSTALL - E2.00.dwg
 PLOT DATE/TIME: 3/19/2021 3:20 PM

ELECTRICAL KEY NOTES:

- (A) INTERIOR LIGHT.
- (B) 1/2" CONDUIT WITH 2-#12 WIRES AND 1-#12 GROUND.
- (C) LIGHT SWITCH.
- (D) DUPLEX OUTLET. (GFCI IF REQUIRED)
- (E) 240 VOLT / 200 AMP - PANEL #1.
- (F) 240 VOLT / 200 AMP - PANEL #2.
- (G) 240 VOLT / 200 AMP - PANEL #3.
- (H) EXISTING 2" PVC UNDERGROUND CONDUIT TO HAU PUMP. INSTALL 2-#12 WIRES AND 1-#12 GROUND.
- (I) EXISTING 2" PVC UNDERGROUND CONDUIT. INSTALL 3-#1 WIRES AND 1-#6 GROUND.
- (J) EXISTING 2" PVC UNDERGROUND CONDUIT. INSTALL 3-#1/0 WIRES AND 1-#6 GROUND.
- (K) EXISTING 240 VOLT / 100 AMP PANEL.
- (L) NEW 6"x 8"x 6" JUNCTION BOX.
- (M) HAU PUMP CONTROLS.



ELECTRICAL FROM CONTROL SHED TO CABINS 1 THRU 6
 NOT TO SCALE

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 LINCOLN COUNTY, WEST VIRGINIA
 CABIN INSTALLATION - ELECTRICAL

LAYOUT TAB: 13 CABIN INSTALLATION - ELECTRICAL
 CAD FILE: R:\030\030-10042-BOAT LAUNCH-HATFIELD MCCOY - Drawing\Cabins\Cabin Installation\Electrical\10042-CABIN-INSTALL - E2.00.dwg
 PLOT DATE/TIME: 3/19/2021 1:20 PM

Panel: PANEL #1																		
		X		NEMA-1			NEMA-3R			NEMA-4X Stainless Steel								
Location:																		
		240/120		Volts,			1			Phase,			3		Wire			
X		Main Lug Only			Main Breaker													
		Bus Rating:			Amps			Main Breaker:			200			Amps				
		Minimum Interrupting Capacity:			22,000			Amps Sym.										
		Flush Mount			X												Surface Mount	
Provide if checked:																		
X		Equipment Ground Bus			Isolated Ground Bus													
		Sub-Feed Lugs			Gutter Taps			Through-Feed Lugs										
Serving	Load (Watts)	Cond. Size	Wire Size	C/B Trip	Cr. No.	Key Notes	A	C	Key Notes	Cr. No.	C/B Trip	Wire Size	Cond. Size	Load (Watts)	Serving			
CONTROL CABIN - LIGHT AND OUTLET	360	1/2"	#12	1P15	1	7	X			2	2P100	#1	2"	12000	CABIN #1 FEED			
CABIN #2 FEED	12000	2"	#1	2P100	3			X		4				12000				
	12000				5		X			6	1P15	#12	2"	908	HAU PUMP			
SPACE					7	5		X	5	8					SPACE			
SPACE					9	5	X		5	10					SPACE			
SPACE					11	5		X	5	12					SPACE			
Total Load-Odd Circuit (Watts)	24360	1. All wire size: #12 AWG minimum except as noted. 2. All conduit size: 3/4 inch minimum except as noted. 3. Ground fault interrupting circuit breaker. 4. Spare circuit breaker. 5. Space only. 6. Shunt-trip circuit breaker. 7. Arc-fault circuit breaker. 8. Solenoid operated circuit breaker.										24908	Total Load-Even Circuit (Watts)					
Total Load-Panel (Watts)	49268											205.3	Total Connected Full Load Amps					
												256.6	Total Derated Connected Full Load Amps					

Panel: PANEL #2																		
		X		NEMA-1			NEMA-3R			NEMA-4X Stainless Steel								
Location:																		
		240/120		Volts,			1			Phase,			3		Wire			
X		Main Lug Only			Main Breaker													
		Bus Rating:			Amps			Main Breaker:			200			Amps				
		Minimum Interrupting Capacity:			22,000			Amps Sym.										
		Flush Mount			X												Surface Mount	
Provide if checked:																		
X		Equipment Ground Bus			Isolated Ground Bus													
		Sub-Feed Lugs			Gutter Taps			Through-Feed Lugs										
Serving	Load (Watts)	Cond. Size	Wire Size	C/B Trip	Cr. No.	Key Notes	A	C	Key Notes	Cr. No.	C/B Trip	Wire Size	Cond. Size	Load (Watts)	Serving			
CABIN #4 FEED	12000	2"	#1	2P100	1			X		2	2P100	#1	2"	12000	CABIN #3 FEED			
	12000				3			X		4				12000				
SPACE					5	5	X		5	6					SPACE			
SPACE					7	5		X	5	8					SPACE			
SPACE					9	5	X		5	10					SPACE			
SPACE					11	5		X	5	12					SPACE			
Total Load-Odd Circuit (Watts)	24000	1. All wire size: #12 AWG minimum except as noted. 2. All conduit size: 3/4 inch minimum except as noted. 3. Ground fault interrupting circuit breaker. 4. Spare circuit breaker. 5. Space only. 6. Shunt-trip circuit breaker. 7. Arc-fault circuit breaker. 8. Solenoid operated circuit breaker.										24000	Total Load-Even Circuit (Watts)					
Total Load-Panel (Watts)	48000											200.0	Total Connected Full Load Amps					
												250.0	Total Derated Connected Full Load Amps					

Panel: PANEL #3																		
		X		NEMA-1			NEMA-3R			NEMA-4X Stainless Steel								
Location:																		
		240/120		Volts,			1			Phase,			3		Wire			
X		Main Lug Only			Main Breaker													
		Bus Rating:			Amps			Main Breaker:			200			Amps				
		Minimum Interrupting Capacity:			22,000			Amps Sym.										
		Flush Mount			X												Surface Mount	
Provide if checked:																		
X		Equipment Ground Bus			Isolated Ground Bus													
		Sub-Feed Lugs			Gutter Taps			Through-Feed Lugs										
Serving	Load (Watts)	Cond. Size	Wire Size	C/B Trip	Cr. No.	Key Notes	A	C	Key Notes	Cr. No.	C/B Trip	Wire Size	Cond. Size	Load (Watts)	Serving			
CABIN #5 FEED	12000	2"	1/0	2P100	1			X		2	2P100	1/0	2"	12000	CABIN #5 FEED			
	12000				3			X		4				12000				
SPACE					5	5	X		5	6					SPACE			
SPACE					7	5		X	5	8					SPACE			
SPACE					9	5	X		5	10					SPACE			
SPACE					11	5		X	5	12					SPACE			
Total Load-Odd Circuit (Watts)	24000	1. All wire size: #12 AWG minimum except as noted. 2. All conduit size: 3/4 inch minimum except as noted. 3. Ground fault interrupting circuit breaker. 4. Spare circuit breaker. 5. Space only. 6. Shunt-trip circuit breaker. 7. Arc-fault circuit breaker. 8. Solenoid operated circuit breaker.										24000	Total Load-Even Circuit (Watts)					
Total Load-Panel (Watts)	48000											200.0	Total Connected Full Load Amps					
												250.0	Total Derated Connected Full Load Amps					

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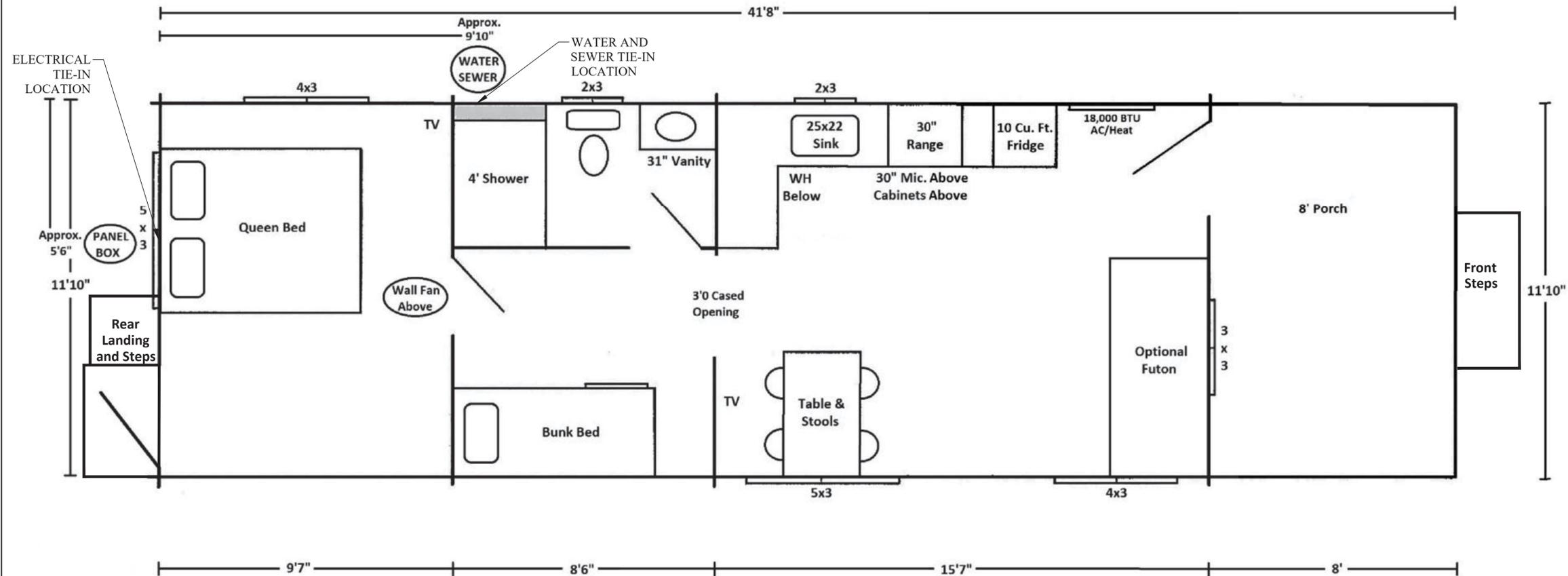


PHASE No.
 CONTRACT No.
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 101-030-10042

HMRA
 IVY BRANCH TRAILHEAD CABIN
 PROCUREMENT & INSTALLATION
 LINCOLN COUNTY, WEST VIRGINIA
 CABIN INSTALLATION - ELECTRICAL

Modified Lakeview Log Cabin

11'10"x33'8" Cabin with 8' Porch (400 SF)



LAYOUT TAB: 14-Lakeview Utility
 CAD FILE: R:\030\030-10042-BDXT LAUNCH-HATFIELD MCCOY-\Drawing\Cabin-INSTALL-SITE PLAN.dwg
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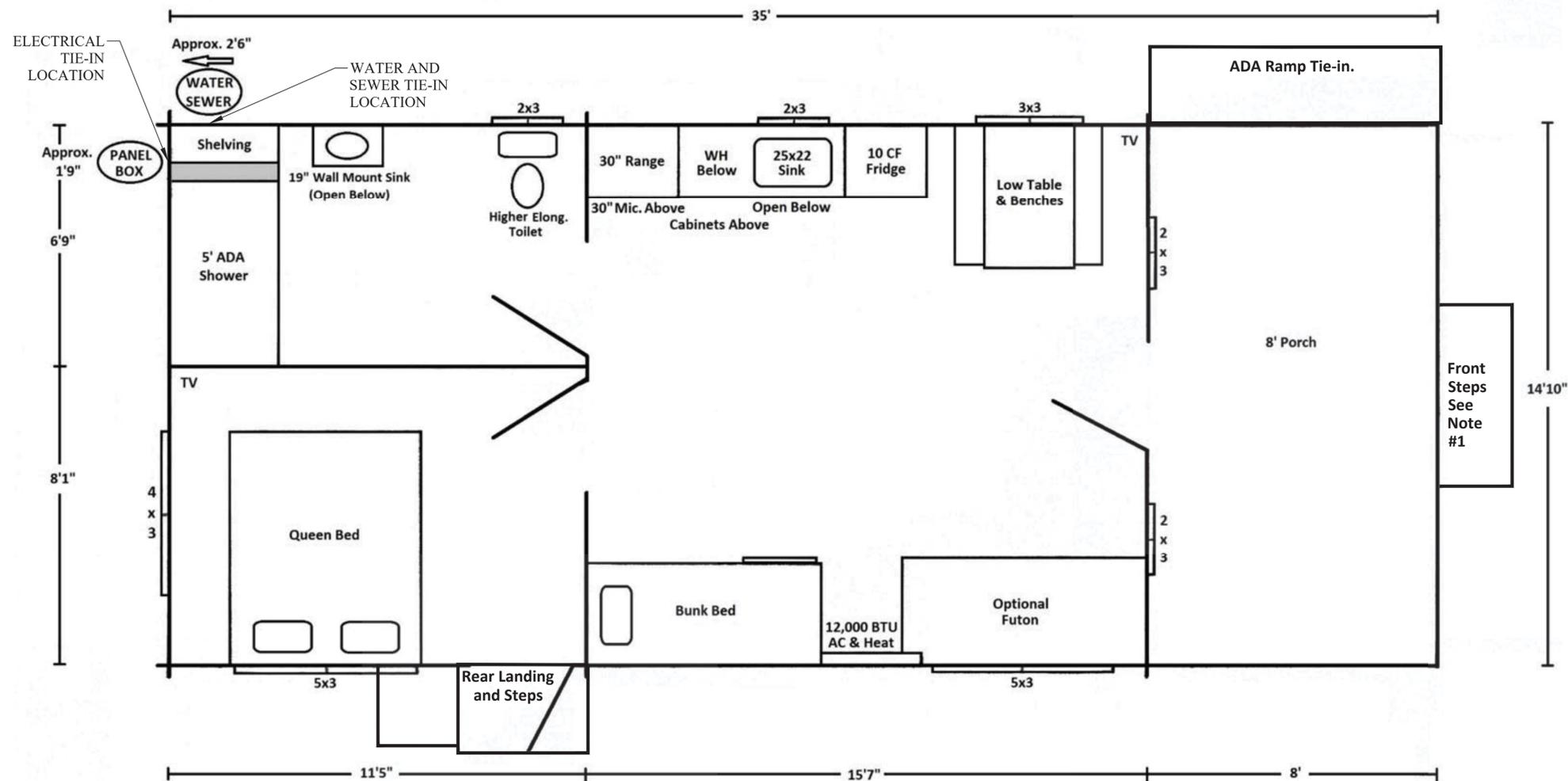
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HMRA
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 PROCUREMENT & INSTALLATION
 LINCOLN COUNTY, WEST VIRGINIA
 OVERALL CABIN UTILITY LAYOUT

Modified ADA Ozark Log Cabin

14'10"x27 Cabin with 8' Porch (400 SF)



LAYOUT TAB: 15-Ozark Utility
 CAD FILE: R:\030\030-10042-BDAT LAUNCH-HATFIELD MCCOY-\Drawing\Cabin\INSTALL-SITE PLAN.dwg
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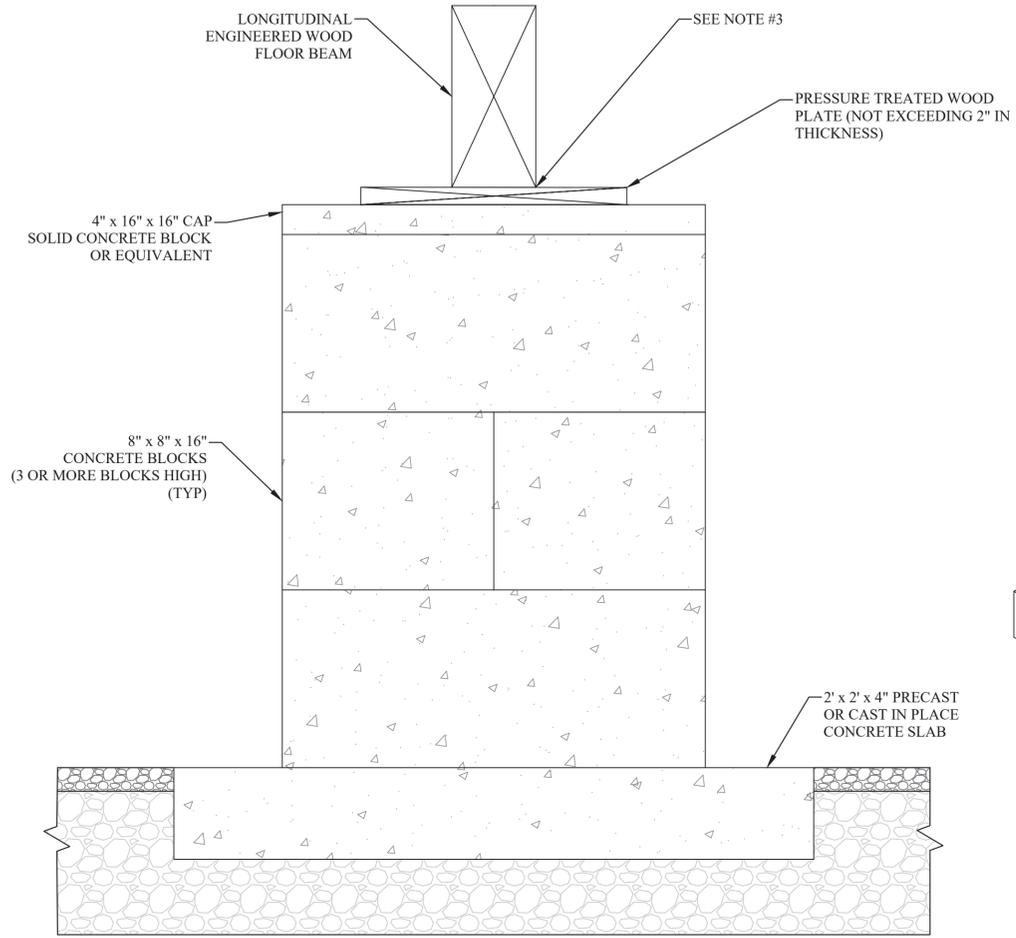
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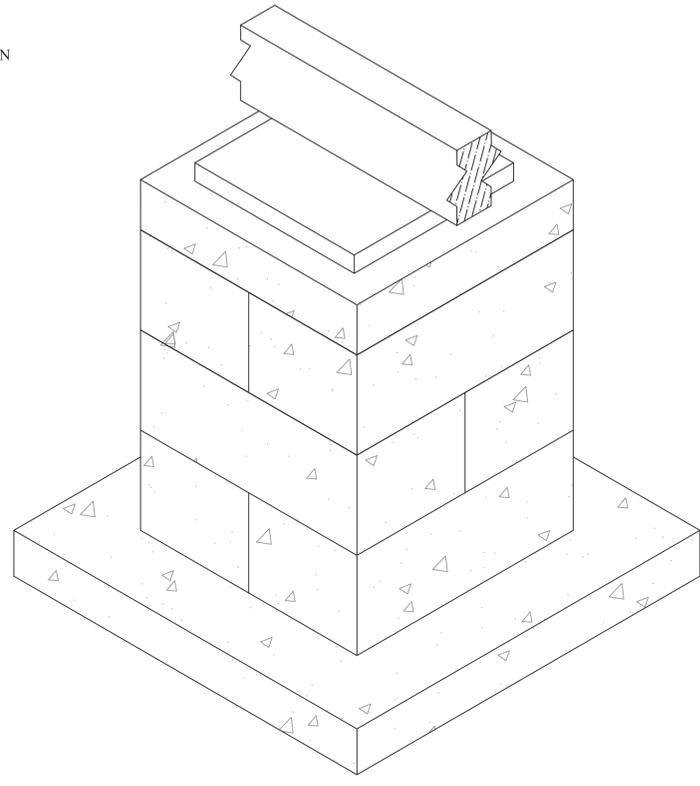
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 LINCOLN COUNTY, WEST VIRGINIA
 OVERALL ADA CABIN UTILITY LAYOUT

SHEET No.
15

LAYOUT TAB: 16 - DETAILS
 CAD FILE: R:\050\030-10042-BD-AT LAUNCH-HATFIELD MCCOY\Drawing\Cabin Installation\10042-Cabin INSTALL-DETAILS.dwg
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ELEVATION VIEW

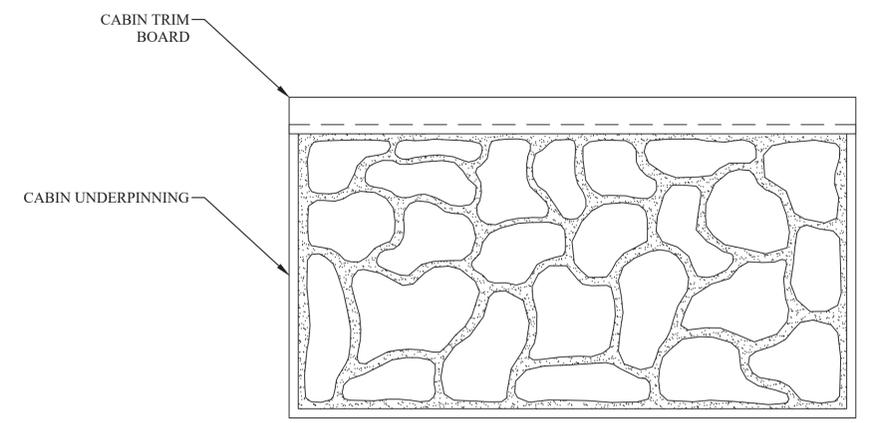


ISOMETRIC VIEW

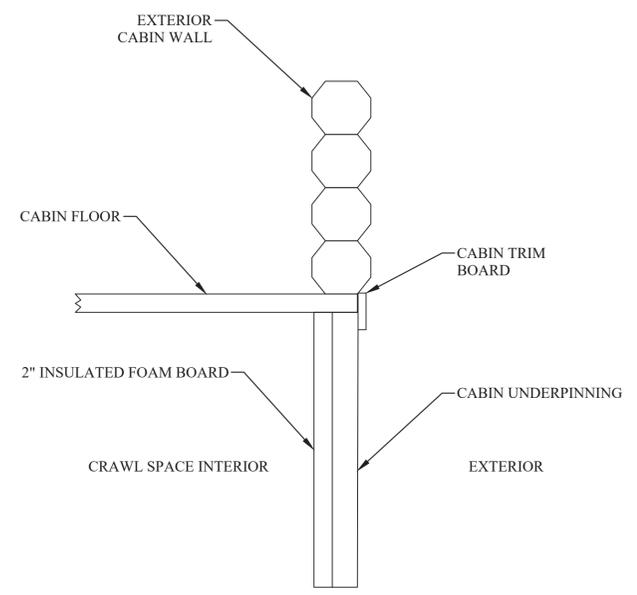
NOTES:

1. CONCRETE BLOCK SHALL BE LOAD BEARING TYPE CONFORMING TO ASTM C90 AND SHALL BE LAID WITH CORES PLACED VERTICALLY.
2. DOUBLE BLOCKS 8"x8"x16" ARE REQUIRED. MAXIMUM HEIGHT FOR DOUBLE BLOCKS IS 6'0"
3. GAP BETWEEN TOP OF PIER AND MAIN FRAME SHALL BE SHIMS (NOT EXCEEDING 1 IN. IN THICKNESS). SHIMS SHALL BE AT LEAST 4 IN. WIDE AND 6 IN. LONG, FITTED AND DRIVEN TIGHT BETWEEN WOOD PLATE AND MAIN FRAME.
4. HEIGHT OF CABIN SHALL BE A MINIMUM OF 30" FROM THE EXISTING GRAVEL BASE.

DOUBLE CONCRETE BLOCK CABIN FOOTING DETAIL
 NOT TO SCALE



FRONT VIEW



SECTION VIEW

1. UNDERPINNING DESIGN BASED ON EVERLOCK SYSTEMS, INC. EverRock SKIRTING. CONTRACTOR SHALL USE EVERROCK VINYL SKIRTING OR AN APPROVED EQUAL.
2. CONTRACTOR TO INSTALL PER MANUFACTURER'S SPECIFICATIONS.
3. INSULATED FOAM BOARD SHALL BE INSTALLED ON THE REAR SIDE OF THE UNDERPINNING.
4. UNDERPINNING COLOR SHALL BE SANDSTONE.
5. CONTRACTOR SHALL VERIFY PANEL HEIGHT IN FIELD ONCE CABINS ARE INSTALLED AND PRIOR TO PURCHASE OF UNDERPINNING. FOR BIDDING CONTRACTOR SHALL BASE PRICE ON AN UNDERPINNING HEIGHT OF 48".

CABIN UNDERPINNING DETAIL
 NOT TO SCALE

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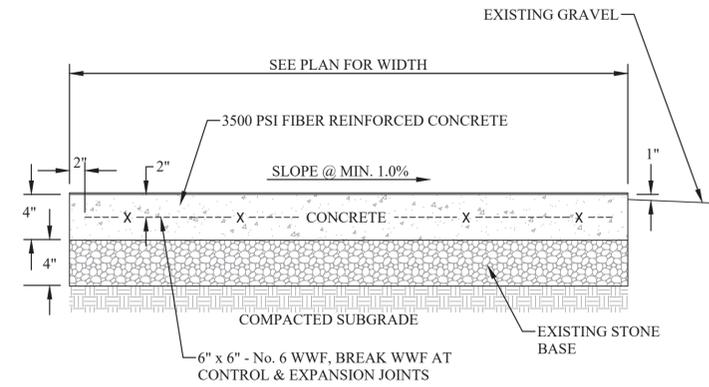
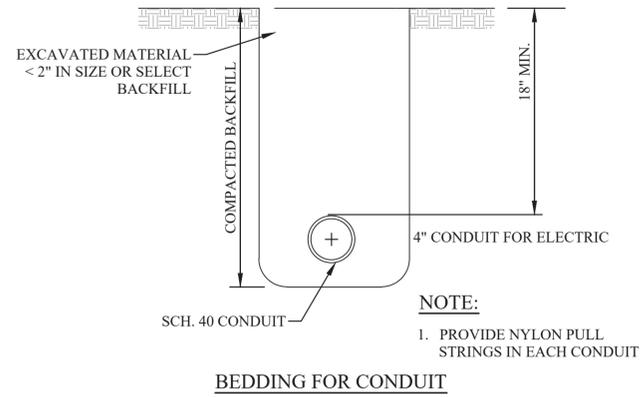


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 PROCUREMENT & INSTALLATION
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 DETAILS**

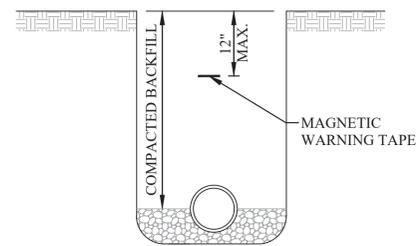


NOTES:
1. ADA ACCESS, PLACE CONTRACTION JOINTS 5'-0" O.C.

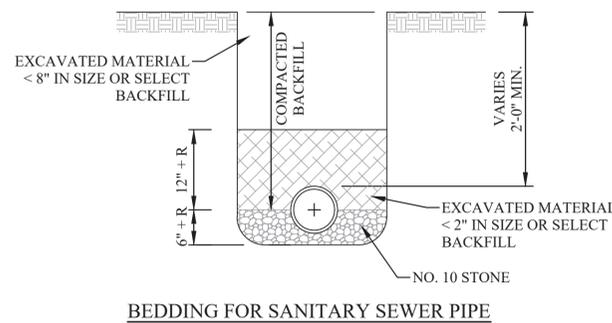
TYPICAL CONCRETE DETAIL
NOT TO SCALE

RED	ELECTRIC
YELLOW	GAS - OIL
ORANGE	TELEPHONE
BLUE	WATER
GREEN	SEWER

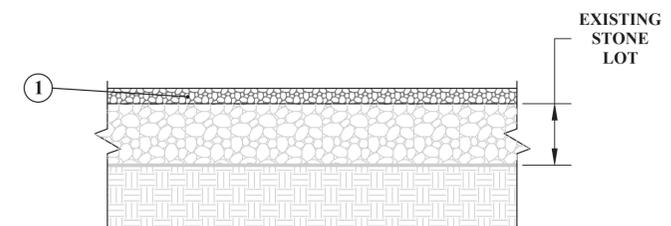
COLOR CODES FOR UTILITY LOCATING
MAGNETIC WARNING TAPE



UTILITY MAGNETIC WARNING TAPE



TYPICAL CROSS SECTION OF TRENCHES
NOT TO SCALE



LEGEND
① 1-2" LIFT OF 3/4" CRUSHER LIMESTONE AT THE DIRECTION OF THE ENGINEER.

CABIN STONE LEVELING/EXISTING STONE
PARKING LOT DRESSING DETAIL
NOT TO SCALE

LAYOUT TAB: 17 DETAILS
CAD FILE: R:\050\030-10042-BD\LAUNCH-HATFIELD MCCOY\Drawing\Cabin Installation\10042-CABIN INSTALL-DETAILS.dwg
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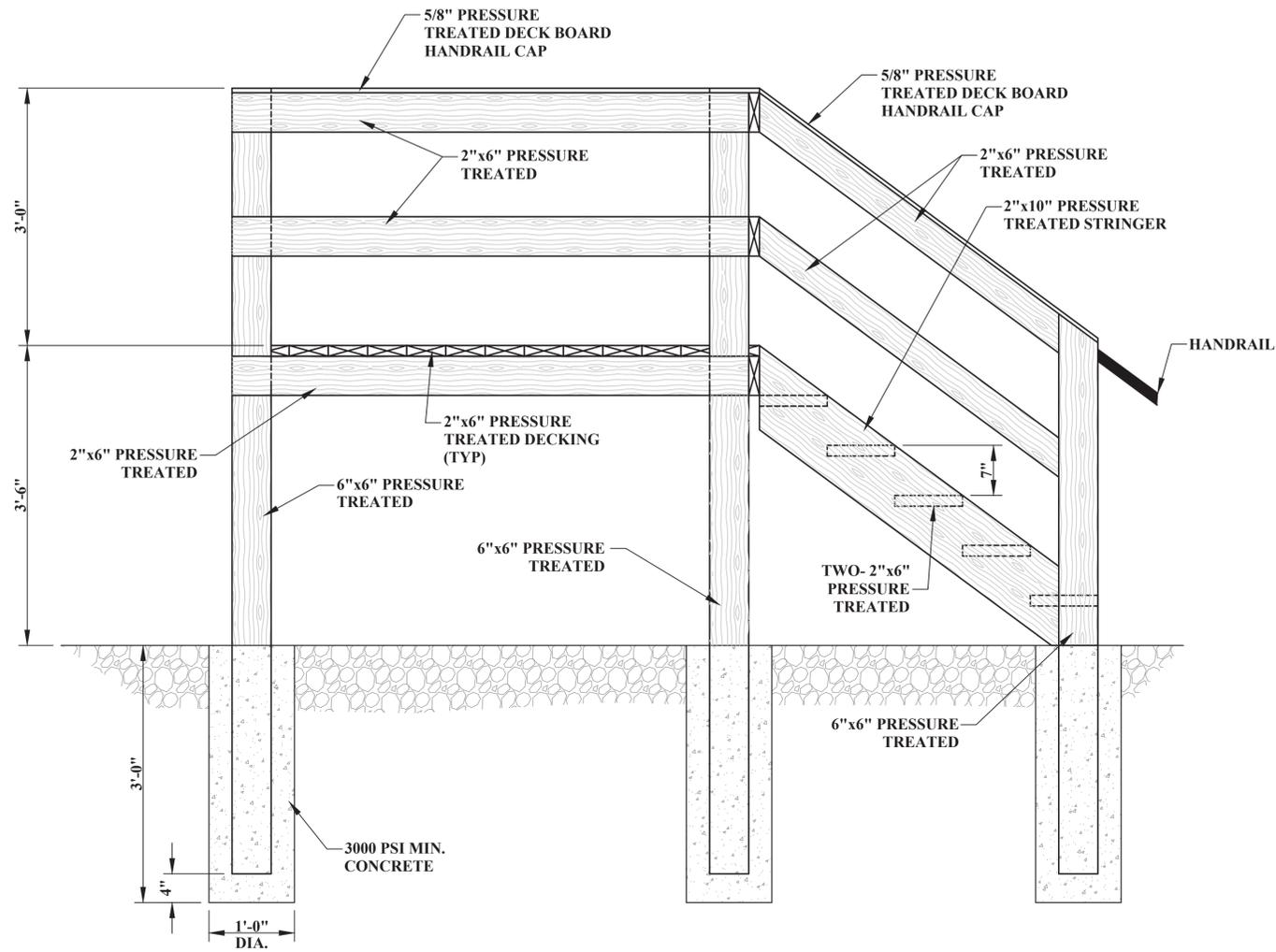
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LINCOLN COUNTY, WEST VIRGINIA
DETAILS

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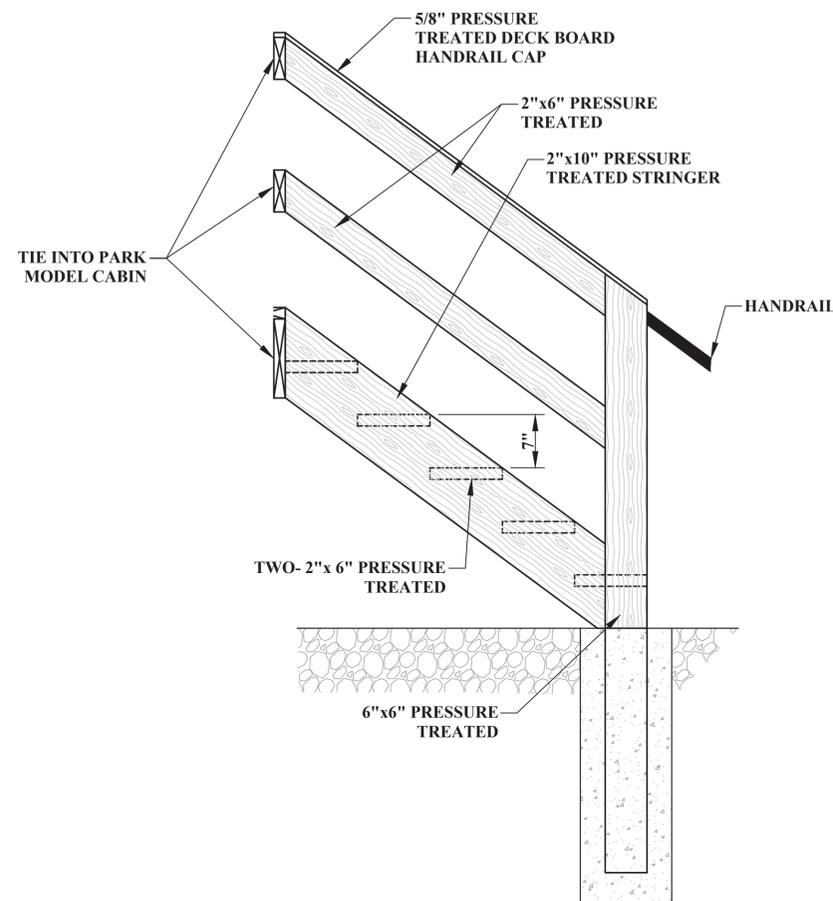
LAYOUT TAB: 18 DETAILS
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 PLOT DATE/TIME: 3/18/2021 4:43 PM



NOTES:

1. THE REAR STEPS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - 1.1. PRESSURE TREATED LUMBER
 - 1.2. 48" x 48" LANDING (INCLUDING RAILINGS)
 - 1.3. 42" HIGH GUARD RAILS IF THE LANDING IS OVER 30" ABOVE GRADE
 - 1.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP
 - 1.5. MAXIMUM 7" RISERS, MINIMUM 11" TREADS

TYPICAL REAR STEP DETAIL
 NOT TO SCALE



NOTES:

1. THE FRONT STEPS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - 1.1. PRESSURE TREATED LUMBER.
 - 1.2. MAXIMUM 7" RISERS, MINIMUM 11" TREADS.
 - 1.3. 60" WIDE.
 - 1.3. 42" HIGH GUARD RAILS IF THE LANDING IS OVER 30" ABOVE GRADE
 - 1.4. 36" HAND RAILS ON BOTH SIDES AND EXTENDING 12" PAST THE BOTTOM STEP.

TYPICAL FRONT STEP DETAIL
 NOT TO SCALE

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 LINCOLN COUNTY, WEST VIRGINIA
 DETAILS**

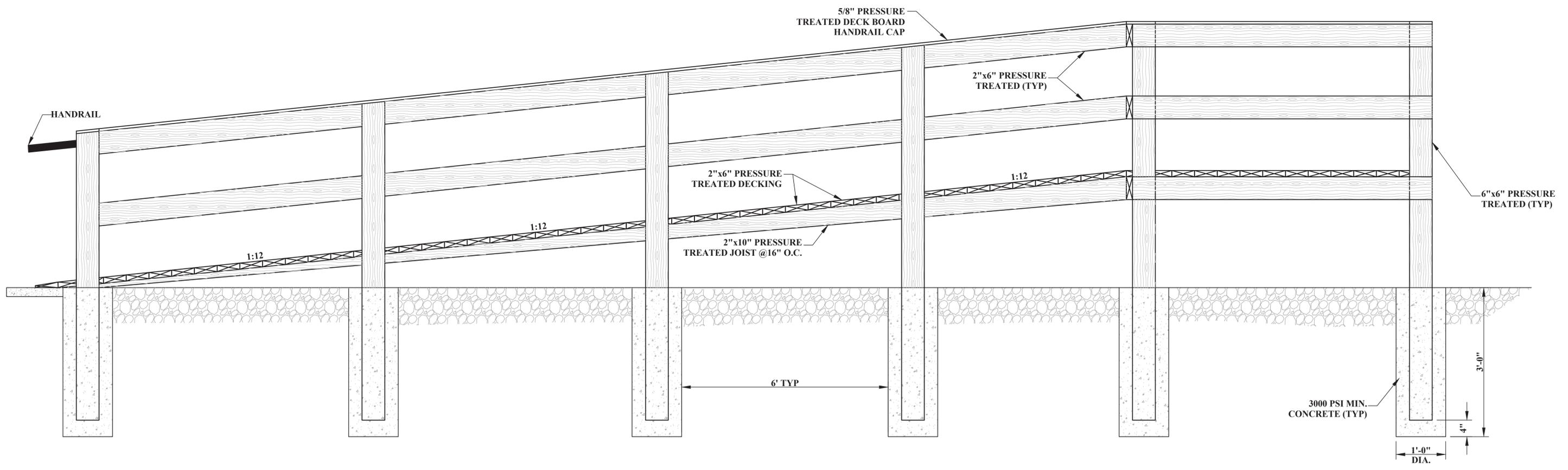
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18

LAYOUT TAB: 19 DETAILS
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NOTES:

1. ADA RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12. THE RISE FOR ANY RAMP RUN SHALL BE 30" MAXIMUM. RAMPS SHALL HAVE LANDINGS AT THE TOP AND BOTTOM OF EACH RAMP RUN. A MAX OF 30' BETWEEN LANDINGS. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS SHALL HAVE A CLEAR LANDING 60" X 60". THE CLEAR WIDTH BETWEEN HANDRAILS SHALL BE A MIN 36".



ADA RAMP DETAIL
 NOT TO SCALE

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